Clinical Lectures

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LECTURE I.

THE VARIETIES OF PULMONARY PHTHISIS.

GENTLEMEN,—I have chosen as the subject of to-day's lecture the "Varieties of Pulmonary Phthisis." We shall have to consider the subject from a purely pathological standpoint and also from the clinical aspect. It is necessary to consider this twofold aspect, because the physician has commonly adopted different terms and a different classification from that employed by the pathologist. The physician often employs terms to distinguish the varieties of phthisis which he recognises at the bedside, which terms are not found among those usually employed by the pathologist. This difference of terms is a very unfortunate one. It is not only extremely confusing to the student, and even to those possessed of considerable pathological and clinical experience, but also because it appears to be in great part unnecessary. If we can bring our clinical experience into accord with the pathological appearances seen on the post-mortem-room table, we shall more clearly understand the life history of the cases of phthisis which come under our observation.

We will look at the subject of the varieties of pulmonary phthisis firstly from the pathologist's point of view. Pathologists recognise two groups of cases of phthisis. The one group of cases, which is very much the larger one, owes its origin to the action of the specific germ of tubercle—the tubercle bacillus. The number of cases which do not owe their origin to the action of that micro-organism, and are therefore not included in the above group, are very few, and comprise only a very small percentage of the cases of phthisis. We have two groups, including espectively the tubercular and the non-tubercular cases of phthisis.

The tubercular class of phthisis comprises by far the majority of cases of phthisis which we meet with either at the bedside or on the post-mortem table. We see, however, great variety in the changes which are found in the lungs in different cases where the disease is advanced, and also differences in the seat of the commencement of the affection. From the differences which cases present, as regards the seat of the commencement of the disease, and from the different changes which bring about the phthisical destruction, pathologists have recognised different varieties of tubercular phthisis. Tuberculosis may commence in the lungs by changes within the alveoli or by changes outside the alveoli, in the alveolar wall or interstitial tissue. When the changes commence within the alveoli we have the variety of tubercular phthisis known as caseous or tubercular broncho-pneumonia; whilst, when the phthisical change first begins outside the alveoli, we have no term which accurately describes the change in all cases. The term that is most commonly employed to describe the cases of tubercular phthisis, where the first and principal change is outside the alveoli, is tubercular peribronchitis. The term, however, is not a very good one, because, although the tubercular process in these cases does probably very frequently begin around the small bronchial tubes, it does not do so in all cases, in some commencing in the alveolar wall, in others in the interstitial pulmonary tissue apart from the bronchi. We must, however, employ this term tubercular peribronchitis, in the absence of a better one, to describe those tubercular cases commencing not only round the bronchi, but anywhere in the interstitial tissue or alveolar walls, or where the chief change, even in advanced cases, is found in these positions. We thus have two varieties of tubercular phthisis: tubercular or caseous pneumonia, and tubercular peribronchitis.

Caseous pneumonia affects the lungs in one of two ways. It is met with in small isolated patches, as the disseminated or lobular caseous pneumonia, or it involves a larger area of lung tissue, may be the whole or greater part of a lobe, when it is known as the lobar variety of caseous pneumonia. The former is much the more common variety of the disease. Both varieties attack especially the uppermost part of one or other lung, and the disease commencing in the apex gradually involves a larger and larger area of pulmonary tissue. This extension of the disease is brought about partly by the gradual peripheric extension of the primary focus, partly by the development, in the neighbourhood of the first patch of disease, of similar secondary foci. Softening gradually ensues in these areas of consolidation, and, the softened material breaking into a bronchus, a cavity is formed, which increases subsequently in size. The rate at which these changes follow one another varies considerably. In some cases a very extensive tract of lung is rapidly broken down, as is seen in the acute cases of phthisis; or the process is a very slow and chronic one, the primary focus remaining limited to one apex for a long time and softening only slowly ensuing in it. Between these two extremes of very rapid and of very slow progress we meet with great variety as regards the rate of extension of the disease. The microscopical changes in cases of caseous pneumonia consist especially in changes within the alveoli. An exudation ensues into the alveoli, and that exudation subsequently undergoes caseation. The character of the exudation varies in different cases and in different parts of the same patch of consolidation. In some parts the exudation is rich in cellular elements, the alveoli are full of cells, some indistinguishable from ordinary leucocytes, others larger and of a more epithelial type, similar to the large cells seen in acute catarrhal pneumonia. In other parts of the consolidated patch, and often mixed up irregularly among alveoli containing the cellular exudation, are other alveoli containing an exudation rich in fibrine. The relative number of the alveoli presenting this fibrinous exudation varies considerably; but in some cases the consolidation of the lung is chiefly effected by such an exudation, and, at first sight, sections taken from such portions of lung have a close resemblance to sections taken from a case of ordinary acute croupous pneumonia. This exudation in caseous pneumonia differs from that of acute croupous pneumonia in that, at some part of the patch of consolidation, signs of caseation can be recognised. The exudation becomes more and more homogeneous in appearance and stains diffusely with logwood, whilst at the same time the outlines of the alveolar walls become lost, and several alveoli appear to be thrown into one large space, where the fibrine is seen to persist often until a remarkably late stage of the disease, and when caseation is considerably advanced.

In addition to this change in the alveoli in caseous pneumonia, we always meet with other changes in the walls of the alveoli and in the interstitial tissue of the lung. The gradual disappearance of the alveolar walls separating the alveoli, containing the above described exudation, from one another has been already mentioned. In addition, the alveolar walls and interstitial tissue are thickened in different parts of the affected portion of lung. In some parts we have simply a small round-cell infiltration of the interstitial tissue, often more or less circumscribed in outline; in others, among these round cells are larger cells of an epithelioid type, and in other parts large typical giant cells are to be seen. We thus have in the interstitial tissue all the elements of tubercle. The relative amount of the exudation into the alveoli and of the changes in the interstitial tissue varies in different cases. We shall see that it is in the cases of tubercular peribronchitis that this interstitial tuberculosis is the prominent feature; but even in typical cases of caseous pneumonia we see a considerable amount of such change. The changes in the interstitial tissue lead in part to softening, in part to fibroid change, the formation of fibrous tissue. The amount of fibrous tissue so formed varies in different cases—the more chronic the case, the more fibrous tissue is formed in the lung. Fibrous tissue is formed not only in the interstitial tissue,

but also in part by an organisation within the alveoli themselves, exactly as has been frequently observed in chronic croupous pneumonia.

Caseous pneumonia as above described accounts for the changes in the lungs in a large number of the cases of phthisis. It is especially well marked in the acute cases of phthisis, and the rapid destruction of the lung in galloping consumption is in great part due to this change. "Tubercular peribronchitis" is the name given to the other variety of tubercular phthisis. In many cases the name accurately describes the changes met with at an early stage of the disease; since in many cases, if not in the majority, the process begins by a tuberculosis round the smaller bronchial tubes. It is not, however, necessary that the process be confined to the immediate neighbourhood of the bronchi. It probably does in some cases commence elsewhere in the interstitial tissue or in the wall of the alveoli, so that under the term tubercular peribronchitis we understand a tubercular process which has its chief seat in any of the parts indicated. The changes in tubercular peribronchitis are similar to those described as affecting the interstitial tissue in the cases of caseous pneumonia. We have all the elements of tubercle formed in the interstitial tissue. Frequently the process commences round the smallest bronchial tubes by a small cellular infiltration, which thickens the wall of the bronchus, and gradually invades the surrounding parts. At a later period we find at various parts round-cell infiltration, with or without larger epithelioid cells and giant cells. We also have here again the formation of fibrous tissue, and as these cases constitute some of the most chronic cases of tubercular phthisis, we may meet with an excessive formation of fibrous tissue. It is these cases, where much fibrous tissue is formed, that sometimes closely resemble, clinically, true cases of fibroid or non-tubercular phthisis. In tubercular peribronchitis, although the change chiefly is in the interstitial tissue, we also get a variable amount of change in the alveoli of the character described under caseous pneumonia. In fact, cases of caseous pneumonia and of tubercular peribronchitis may be said to differ from one another only in the relative proportion of alveolar and the interstitial changes present. In all cases of tubercular phthisis we have changes within and without the alveoli; but, where the intra-alveolar change is the predominant factor, we speak of the case as one of caseous pneumonia; whilst where the interstitial changes predominate, we have to do with tubercular peribronchitis.

Both the cases of caseous pneumonia and the cases of tubercular peribronchitis owe their origin and nature to the tubercle bacillus. If we consider tuberculosis as a specific chronic inflammation, we shall have very little difficulty in understanding how it is that in some cases of phthisis we have to do chiefly with caseous pneumonia, in others with tubercular peribronchitis. In inflammation we meet with two chief changes—an exudation from the bloodvessels, and a proliferation of tissue elements of the part inflamed. In some cases of inflammation the one element predominates, in others the other element. So it is in tubercular phthisis. In some cases, as where we have caseous pneumonia, the exudation element is to the front; whilst in others the proliferation is most marked, and we see a phthisical lung presenting the appearances of tubercular peribronchitis. There is therefore no essential difference between these two classes of cases of tubercular phthisis. We have simply to do with a preponderance in one case of a change which is less marked, but still present to a certain degree, in the other case. The caseous pneumonia specially accounts for the acute cases of phthisis, whilst the tubercular peribronchitis is the factor which is most pronounced in the chronic cases.

We now pass on to consider the other varieties of phthisis besides the tubercular. Cases of non-tubercular phthisis are undoubtedly very rare as compared with the number of cases of the tubercular affection. By the non-tubercular form of phthisis we mean a phthisis which does not owe its origin to the action of tubercle bacilli. The best recognised cases of non-tubercular phthisis are the cases of so-called true fibroid phthisis. I say *true* fibroid phthisis because unfortunately some writers have used the term fibroid phthisis to embrace all cases of phthisis, whether of tubercular or non-tubercular origin, where there has been an extensive formation of fibrous tissue. It must be clearly understood that, in the course of these lectures, by fibroid phthisis is always meant a non-tubercular affection.

The actual existence of true fibroid phthisis has been repeatedly questioned, and although I have no doubt about the existence of such a disease, it is equally certain that many cases, which are diagnosed as belonging to that group, are really cases of very chronic tubercular phthisis, where there has been much fibrous tissue formed in the lung. Fibroid phthisis was formerly regarded as a much more common malady than it is believed to be at the present day, and probably the explanation of that fact is the one above given, that many cases so described were merely cases of chronic tubercular phthisis. True non-tubercular fibroid phthisis is an exceedingly rare affection. By true fibroid phthisis is meant a form of destructive inflammation of the lung where the whole or greater part of one organ is first transformed into a mass of fibrous tissue, in which cavities are subsequently formed. Such cavities are formed partly by a necrosis of the imperfectly nourished fibrous tissue, but chiefly probably by an ulceration of the bronchi running through the fibroid lung. The history of cases of true fibroid phthisis varies. In some cases there is an acute onset to the illness, with a subsequent chronic course of the disease; in others the affection is chronic from the very commencement. This difference in the history of such cases can be traced to the manner in which the fibroid condition of the lung has been brought about. We can recognise three varieties of fibroid phthisis, varieties which differ in the mode in which the fibrous change has been effected. These three varieties of fibroid phthisis are:—

1. Chronic croupous pneumonia.
2. Chronic catarrhal pneumonia.
3. Chronic interstitial pneumonia.
   (*a*) Primary (Corrigan's cirrhosis).
   (*b*) Secondary to inhalation of foreign particles (pneumono-koniosis).

Chronic croupous pneumonia is where a case of acute croupous pneumonia has not resolved, but instead the whole or part of a lung has become transformed into fibrous tissue. This is a rare termination for acute croupous pneumonia, but it is one which is well recognised, and on the patbology of which a considerable amount of work has been done. We have, in the course of the last ten years, had several cases in the pathological department of the infirmary, and I show you here a preparation from one of the cases. The fibrous tissue in these cases of chronic croupous pneumonia develops in part in the interstitial tissue of the lung, but in addition, also, we get an organisation taking place in the interior of the alveoli. The croupous exudation within the alveoli becomes replaced by fibrous tissue. In some cases of chronic croupous pneumonia the affected lung appears of a red, in others of a grey, colour, and hence pathologists have recognised a red and a grey variety of the disease. It is probable that the difference in colour depends upon the age of the affection, the grey representing a more advanced stage of the disease than the red.

Chronic catarrhal pneumonia is probably a very rare termination of acute catarrhal pneumonia. Where acute catarrhal pneumonia does not resolve and terminate in recovery, the most common change to ensue is for caseation to take place; in other words, for the case to become tubercular, and for the lung to present on post-mortem examination patches of caseous pneumonia. But in some cases, where resolution does not take place, it is probable that the lung does not become tubercular, but that, as we have seen in the croupous variety, fibrous tissue is formed, and portions of one or both lungs remain consolidated, the consolidation being due to the formation of the fibrous tissue. Probably there is such a disease as this non-tubercular chronic catarrhal pneumonia, but it is certainly a very rare affection, and, I believe, even more so than chronic croupous pneumonia. The most common unfavourable result of acute catarrhal pneumonia is for the case to become tubercular, and ordinary caseous pneumonia to be found after death. A much more rare result is for the case not to become tubercular, but for one variety of true fibroid or non-tubercular phthisis to develop.

Chronic interstitial pneumonia is a form of fibroid phthisis which has been much longer recognised than either of the above two varieties. It is a simple chronic inflammatory process in the interstitial tissue, which results in the formation of fibrous tissue. As a rule, one lung alone is affected, and it may be only the lower part of the lung. Probably,

as before stated, many of the cases which have been described as belonging to this class have been really only very chronic cases of chronic tubercular phthisis, where there has been much fibrous tissue formed. Nevertheless, there are some cases of simple, non-tubercular, fibroid phthisis, which may be correctly placed in this class of chronic interstitial pneumonia. In some cases the disease begins without any known cause, and we then have the malady which we may term primary chronic interstitial pneumonia. This form is often known under the name of Corrigan's cirrhosis of the lung. In other cases the exciting cause of the chronic interstitial change has been the inhalation of some foreign particles, usually arising from the occupation which the patient has pursued. This class of secondary chronic interstitial pneumonia has been termed pneumono-koniosis. The most common varieties of fibroid phthisis comprised under this head are those seen in colliers from the inhalation of carbonaceous particles (anthracosis), those seen in stonemasons from the inhalation of particles of silica (silicosis or chalicosis), and those from inhalation of particles of the red oxide of iron (siderosis). It is necessary to remind you that not every case of phthisis seen in persons following the above occupations is to be classed as true fibroid phthisis. Colliers and stonemasons far more commonly suffer from ordinary tubercular phthisis than they do from anthracosis or silicosis respectively. It is noteworthy that although we are in the immediate neighbourhood of a large coal mining district, and in a district where a large number of stonemasons are employed, we exceedingly rarely ever see a case of true fibroid phthisis in colliers or stonemasons, but we not unfrequently see tubercular phthisis among such individuals.

A variety of phthisis termed pleurogenic phthisis has been described by many writers. It is one form of true non-tubercular fibroid phthisis, where we have a very thickened pleura and the lung itself in a condition of fibroid induration. It is especially noted in these cases that large bands of fibrous tissue stretch from the thickened pleura into the lung. The term pleurogenic phthisis is not a good one for these cases, as it probably does not accurately describe the changes which have effected the consolidation, and is apt to mislead the student on that point. It is not probable that the broad fibrous bands stretching from the pleura into the lung and the other excessive formation of fibrous tissue throughout the lung have arisen from a simple pleurisy which has spread inwards from the pleura. It is more probable that the thickened pleura owes its origin to simple pleurisy, and the induration of the lung to simple pneumonia—that, in other words, we have had to deal with a pleuro-pneumonia. In some cases these instances of pleurogenic phthisis would be classed among our rare group of primary chronic interstitial pneumonia; in other cases they should be placed in the class of chronic croupous pneumonia. It seems unnecessary to recognise by the special name of pleurogenic these cases of true fibroid phthisis.

It will be thus seen that fibroid phthisis may begin as an acute disease, either as acute croupous or as acute catarrhal pneumonia. In other cases it is chronic from the very commencement, the pathological anatomy then being accurately described as chronic interstitial pneumonia, which may be primary or secondary to the inhalation of foreign particles (pneumono-koniosis). Also that true fibroid phthisis is a very rare disease, and as compared with tubercular phthisis it comprises very few of the cases of phthisis.

It is possible that in addition to tubercular and to true fibroid phthisis we have another form of phthisis.

Destructive changes in the lungs are very common in cases of diabetes. In some cases of diabetes we have ordinary tubercular phthisis developing, in other cases true pulmonary gangrene supervenes. In a third series of cases where destructive lung changes occur in diabetics, we have to do neither with tubercular phthisis nor with true pulmonary gangrene. In such cases the clinical history and physical signs have many points of resemblance to other forms of phthisis, but one great and important difference is, that repeated examinations of the sputum reveal no tubercle bacilli. The pathological appearance, also, of such lungs is not that of tubercular phthisis, but often has a more close resemblance to some forms of pulmonary gangrene. These cases have been termed the non-bacillary phthisis of diabetics. They are very interesting from a pathological point of view, and it is very difficult to classify them when speaking of the varieties of phthisis. We cannot escape from the conclusion that diabetics are subject to a form of phthisis which is non-tubercular. Our difficulty is to know where to place such cases. I believe that some of the cases described as the non-bacillary phthisis of diabetics, are really varieties of chronic croupous pneumonia, and would consequently come under our heading of fibroid phthisis in a pathological classification. In other cases, which cannot be described as forms of chronic croupous pneumonia, we get a subacute ulcerative process in the lungs of a non-tubercular nature. In the present state of our knowledge it seems best to place this last group of cases in a separate class, and to recognise them as cases where we have a subacute ulcerative process in the lung which does not owe its origin to the action of the tubercle bacillus. Our classification of phthisis will consequently be as follows:—

- I. Tubercular phthisis
  - 1. Caseous pneumonia.
  - 2. Tubercular peribronchitis.
- II. Non-tubercular phthisis
  - A. *Fibroid phthisis*
    - 1. Chronic croupous pneumonia.
    - 2. Chronic catarrhal pneumonia (ending in simple fibroid induration).
    - 3. Chronic interstitial pneumonia.
      - (*a*) Primary (Corrigan's cirrhosis).
      - (*b*) Secondary (pneumono-koniosis).
        - (1) Anthracosis.
        - (2) Silicosis &c.
  - B. Non-bacillary phthisis of diabetics

Probably some cases of true fibroid phthisis become at a late stage tubercular, the tubercular process becoming as it were grafted on the simple chronic inflammatory condition which first led to the induration of the lung. It seems very probable that a lung, the seat of simple chronic fibroid induration, might be a favourable seat for the settlement and development of tubercle bacilli. Although this secondary development of tubercle in a lung, the seat of fibroid induration, is very probable, it is a very difficult one to prove conclusively.[1]

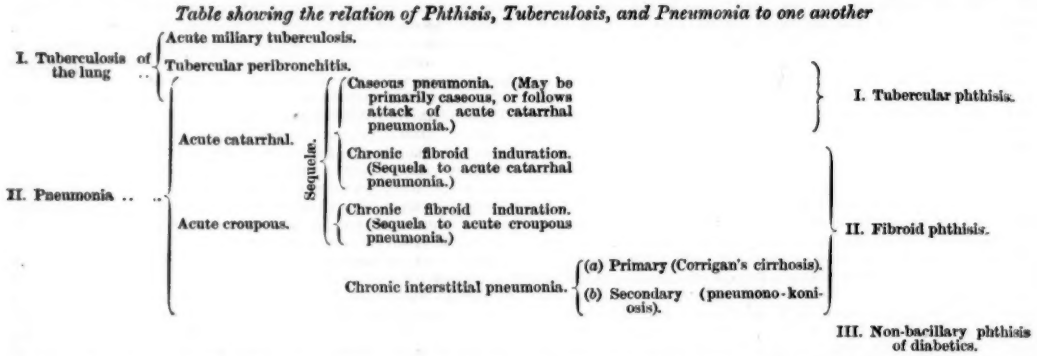
The relation of phthisis to pneumonia will possibly have been comprehended from the foregoing remarks. Frequently, however, students have great difficulty in understanding that relation, so possibly the tabular statement on the following page may make the subject more clear.

If we now direct our attention to the clinical aspect of the question of the varieties of phthisis, we are at once met with the difficulty caused by the different classifications which have been adopted by different clinical observers. You will frequently meet with such terms as "pneumonic phthisis," "apex catarrh," the "tubercular form of phthisis," and "fibroid phthisis," employed by different clinical observers. Some of these terms you will notice have not been heard of when we were considering the varieties of phthisis from the purely pathological aspect, and other terms used by these clinical authorities are employed in a very different sense from what we have used them in our pathological considerations. For instance, by the "tubercular form of phthisis" the physician has described not all forms of tubercular phthisis, but one variety of tuberculosis of the lung, which has certain clinical features. Also "fibroid phthisis" has been applied not only to true non-tubercular fibroid change in the lung, but also to all forms of tubercular phthisis, where there has been much fibrous tissue developed; and, further, in clinical works we still frequently meet with the term "apex catarrh." This last term appears to me to be specially unfortunate, and to be very misleading. It is probable that in all the cases described as "apex catarrh" we have to deal with a more extensive and serious affection than the term would be thought to apply to. That in such cases there is already, at the time the diagnosis of "apex catarrh" is made, a true tubercular consolidation of a limited portion of the apex, although the indications of that consolidation may be very indefinite.

[1] A case which I published (Journal of Anatomy and Physiology, 1881) some years ago was probably a rare instance of the grafting of tubercle on a lung which had previously become completely consolidated by chronic croupous pneumonia

It appears to be very desirable that we should select some classification for clinical purposes which will not be out of harmony with the pathological one which we adopt; and we should seek some method of classification which will as nearly as possible correspond with the varieties of phthisis seen on the post-mortem-room table. The following is a very simple classification, which, in the present state of our knowledge, will probably be found to be more useful than classifications including a larger number of varieties. The basis of the classification is the fact whether the phthisis is a tubercular or a non-tubercular one, and the sub-varieties depend upon the acuteness or chronicity of the case.[2]

Table showing the relation of Phthisis, Tuberculosis, and Pneumonia to one another


I. Tuberculosis of the lung
Acute miliary tuberculosis.
Tubercular peribronchitis.
II. Pneumonia
Acute catarrhal.
Acute croupous.
Sequelæ.
Caseous pneumonia. (May be primarily caseous, or follows attack of acute catarrhal pneumonia.)
Chronic fibroid induration. (Sequela to acute catarrhal pneumonia.)
Chronic fibroid induration. (Sequela to acute croupous pneumonia.)
Chronic interstitial pneumonia.
(a) Primary (Corrigan's cirrhosis).
(b) Secondary (pneumono-koniosis).
I. Tubercular phthisis.
II. Fibroid phthisis.
III. Non-bacillary phthisis of diabetics.

Clinical Classification of Phthisis.

I. Tubercular phthisis	(*a*)	Acute.
	(*b*)	Subacute.
	(*c*)	Chronic.
II. Non-tubercular phthisis ...	(*a*)	Fibroid.
	(*b*)	Non-bacillary phthisis of diabetics.

The first group (I.) comprises the great majority of the cases of phthisis. It comprises all cases which owe their origin to the tubercle bacilli, and so corresponds to the class of tubercular phthisis in our pathological classification. It includes the cases described in the pathological list as caseous pneumonia and those as tubercular peribronchitis.

The acute tubercular phthisis (I. *a*) includes the very acute cases of phthisis, the cases of so-called galloping consumption; cases which run a fatal course in from a few weeks to a few months. The chronic tubercular phthisis (I. *c*) includes the cases of phthisis of bacillary origin, which last a considerable time, cases which vary from two years to ten, or even in rare cases fifteen or twenty years in their duration. The cases which last a very long time are associated with the formation of much fibrous tissue, but, nevertheless, if they are of tubercular origin, they are placed here, and not under the head of fibroid phthisis. The subacute class of tubercular phthisis (I. *b*) includes those cases which are intermediate in their duration between the acute and the chronic cases.

The class of non-tubercular phthisis includes all the cases of phthisis which do not owe their origin to the tubercle bacilli. It has two sub-divisions, the fibroid phthisis and the non-bacillary phthisis of diabetics. The sub-group (II. *a*), fibroid phthisis corresponds exactly to the fibroid phthisis in the pathological classification. It includes all cases of chronic fibroid induration of the lung of a non-tubercular nature. Clinically, these cases of fibroid phthisis are chiefly characterised by their long duration, by the absence of pyrexia during the greater part of their course, and usually by only one lung being affected (may be only the lower lobe of one organ), and by the absence of tubercle bacilli from the expectoration, even after that has been repeatedly examined for those organisms. Cases of very chronic tuberculosis of the lung, where there has been much fibrous tissue formed, are therefore not included under this heading of fibrous phthisis. It is to be remarked, however, that some cases of very chronic tubercular phthisis have many of the clinical characteristics of true fibroid phthisis. The resemblance between these cases is sometimes so close that we can only satisfy ourselves that the case is not one of true non-tubercular fibroid phthisis by the discovery in the sputum of tubercle bacilli. I show you here such a case; it presents a unilateral affection of the chest, which is running an apyrexial course, where there is evidence of consolidation of the whole of one lung with excavation in parts, and where the man is very well nourished although the disease has been in progress for the past seven years. The case presents, in fact, the features of fibroid phthisis; but although the sputum was examined seven times for tubercle bacilli, with negative results, the eighth examination revealed a few undoubted bacilli. So that the case is one, not of true fibroid, but of very chronic tubercular phthisis. It is probable that many of the cases which have been described as examples of fibroid phthisis, and of that variety known as Corrigan's cirrhosis of the lung, were cases similar to this one and were really instances of very chronic tubercular phthisis with the formation of much fibrous tissue. Sufficient has already been said in reference to the non-bacillary phthisis of diabetics, and also as to the possibility of a case of non-tubercular fibroid phthisis afterwards becoming tubercular, when speaking of the varieties of phthisis from a pathological aspect.

[2] It must be noted that the sub-varieties depend upon the course of the disease, and not upon its mode of onset, since cases of chronic phthisis not unfrequently begin very abruptly.

Clinical Lecture

ON

MASSAGE SCOOPS AND IRRIGATION IN THE EXTRACTION OF CATARACT.

Delivered at the Ulster Eye, Ear, and Throat Hospital.

BY DR. McKEOWN.

(*Concluded from page 785.*)

IN my desire to reach the fundamentals in relation to massage as a force to remove cortex I may not have conveyed a full idea as to this method. I now supply the want. Massage is of different kinds. It may be a circular friction or rubbing through the eyelids, so as to affect the peripheral part of the lens and bring the cortex into the pupil, but in my former remarks I was not concerned with this harmless procedure, but with the power of massage to remove sticky and resistant cortex into and through the wound. I have now finished the argument in relation to the physical and theoretical side of the question; but theory and practice do not always agree, for theory may be quite sound whilst practice may lead to results quite different from what might have been reasonably expected. Of course practice is at a disadvantage because of so many sources of error which theory has overlooked; for, assuming that physical laws and theory settled that injection and irrigation were the most rational methods, still we would have to consider: (1) The possibility of the introduction of germs inside the eye; (2) the possible irritation of the iris from injection and irrigation; (3) whether irrigation or

injection is not attended with a larger percentage than usual of loss of vitreous. I shall now answer these questions. With the precautions I take there is little chance of the introduction of germs into the eye. In forty-seven intraocular injections in the year 1888 I have not had a single case of panophthalmitis or suppuration of the corneal wound. In the last four years I have irrigated or injected 377 times, and have had four losses by panophthalmitis, but I cannot attribute even one loss to irrigation. One was caused by a lacrymal affection, one occurred three weeks after the operation on snipping off vitreous which I found in the wound on the sixth day, and did not retract; one began in the wound six days after the operation; and one occurred in an unmanageable patient with traumatic cataract, who would not be quiet, but removed the bandages and inspected his eye. As to the irritation of the iris and consequent iritis, comparing my experience of the last five years in operations of the most varied kind—operations many of which, according to current views, I should not have performed,—I have not had more, but perhaps less, iritis than when I carefully selected my cases during the previous thirteen years of my practice. But I cannot go into this matter minutely, as in statistics dealing with small differences, to be of real value, one must not only weigh the numbers but investigate each case. I can speak very definitely about the loss of vitreous. In the first years of irrigation and injection the losses were above the average, but that is not strange for a new method. In the year 1888, in forty-six irrigations, exclusive of irrigation in traumatic cataract, I have had only one real loss, and in another case a bead of vitreous appeared in the wound, which I could not call a loss, and in the present year I have not had a single loss. I think I have now in this matter a record which equals that of the best of the operators who only operate on ripe cataract.

And now I wish to contrast my practice with that of other ophthalmic surgeons in dealing with patients. To a patient with a striated cataract, or a cataract with facets of transparent cortex, an ophthalmic surgeon with old notions usually says, "Your cataract is not ripe; it will be in a month or two, come back then." In such a case I say, "I will operate on you now." To a patient with a very slowly progressing cataract going on a number of years, but leaving him sufficient vision to go about, and read large type, and even very small type close to the eye, the ophthalmic surgeon with old ideas says, "Your cataract is unripe, and may be so for years; come back in some time, and if the disease have advanced sufficiently I will operate." I say in a like case, "If you have means to live and a contented mind, you may go about without an operation; but if you have not, I advise an immediate operation."

I now call your attention to various points subsidiary in a sense, but still very important in relation to the removal of cortex. I have only spoken of irrigation and injection in relation to removal of cortex after expulsion of the nucleus, or of so much of the lens as can be expelled by pressure; but there is another form of injection which I frequently practised at first, and to which I referred specially in my address to the British Medical Association in Belfast in 1884—viz., the injection by a fine needle inside the capsule before the expulsion of the body of the lens, to break up sticky and transparent cortex, and make extraction more perfect and easy. I afterwards abandoned that method because of the apparent capability of irrigation to remove any sort of cortex after expulsion of the nucleus, iridectomy having been performed. Lately, however, since the reintroduction of operation without iridectomy, I have returned to the method of injection inside the capsule by the fine needle, especially in cases of sticky cortex, in which I do not perform iridectomy. I also do it in cases of transparent cortex, in which iridectomy is performed. I consider this method has a good future, but I shall not further now refer to it. Should iridectomy be performed as a rule, or only in exceptional cases? There is no doubt that an operation without iridectomy is better than one with iridectomy, assuming that the cataract is one which can be easily removed, that the iris does not prolapse in the wound, and that the patient can be relied on for quietude after the operation. It causes less traumatism. There is no vascular structure injured, except one might say the iris was bruised in the expulsion of the lens, but I think far too much importance is attached to this. Indeed, in the old days bruising of the iris was the alleged cause of inflammation, but the real cause was usually retained cortex. The rule I follow is this. If the patient be quiet, if the lens be one which the surgeon can clear out by preliminary injection by a fine needle and by irrigation or injection after expulsion of the nucleus without iridectomy, then iridectomy should not be performed.

If the cataract be very unripe, and if at the time of the operation it is evident that the iris does not show contractile power, but tends to go into the wound, then an iridectomy should be performed. When a patient during the first stage of the operation shows want of control, then iridectomy should be performed before expulsion of the nucleus. When a patient loses control after expulsion of the nucleus and the iris comes into, or tends to come into, the wound, then iridectomy is a very hazardous proceeding. I have thought of how to meet this difficulty. Chloroform and ether are out of the question because of the struggling and congestion. I have determined in such a case to have nitrous oxide gas administered. It produces lividity from want of aeration of the blood, but no congestion, usually no struggling, and the eye looks down when the patient is completely under its influence, just in the best position for performing an iridectomy. I have had the apparatus for administration, but I am glad I have not had yet to use it.

Should injection or irrigation be made by introducing the nozzle inside the capsule of the lens or only from the exterior by depressing the sclerotic edge of the section? This depends entirely on the character of the cataract, for if the surgeon operate only on ripe cataract, he may wash out the residue by irrigation from the outside; but if the surgeon operate on obviously unripe cataract, or if he operate on a cataract presumed to be ripe, but which turns out resistant, then he may have to introduce the nozzle of the syringe or irrigating bottle into the eye. The superiority of irrigation with the nozzle inside the eye over irrigation from the outside you have just lately seen in the case of Owen M——. He had an unripe cataract, an anterior synechia, and some corneal opacity. Irrigation from the outside had no effect, but when I introduced the nozzle inside the capsule of the lens the whole of the cortex was instantly removed.

Is the electric light of advantage for eye operations? I think it of much advantage for my operations, and I therefore use it. It allows the operator to see masses of transparent or semi-transparent cortex, particularly after iridectomy, very well, and when a haze is shown by it over the pupil the operator may determine, especially when irrigation is used, whether the haze is owing to the capsule or to a film remaining after blood in the anterior chamber, and not to retained cortex, and thus stop needless efforts to attain perfection.

After all I have said to you, still the question of the relation of intraocular irrigation and injection to unripe cataract is the cardinal one for progress in this department of ophthalmic work. Though I may follow, for the purpose of comparison, the dicta of ophthalmic surgeons in regard to what are called unripe cataracts and call them unripe, yet I affirm that many cataracts supposed to be unripe for ordinary operations are quite as ripe as many operated on. Unripeness is a relative term. It has no substantial positive signification in itself. It simply shows the want of resource of the surgeon. Indeed in the old days, when depression and reclination were the rule, soft cataracts which we much like to operate on now by extraction were thought to be unripe because they could not be depressed—that is, they were unripe for the operation for the time being in vogue.

When I look at the various and changing elements in my operative work since the spring of 1884, I find it very difficult to frame short statistics, especially as cases must be weighed rather than counted. I have operated with and without injection or irrigation, with and without iridectomy, with and without injection inside the capsule by a fine needle; I have operated on cataracts ripe, over-ripe, striated, with transparent facets, with periphery quite clear and only a cloud in the centre, incipient, posterior polar—in fact, there is no grade or condition of cataract on which I have not operated. It is difficult to make things clear to you with such a multiplicity of details. I shall limit my examination to the last year, as representing my present practice and results. But I do not include traumatic cataract, as no generalisation can be made in that branch of operative work, and I omit an almost hopeless case, in which there was retinal detachment.

In 1888 I operated on twenty-six ripe cataracts, and in eighteen of these I did not perform iridectomy; on fourteen cases of unripe cataract (striated cortex, and cortex with transparent facet), and in ten of these iridectomy was not performed; in six very unripe cases of cataract (embracing two posterior polar, one in which V=$\frac{1}{6}$, and three could count fingers at four feet) iridectomy was performed. Injection inside the capsule by fine needle was performed fifteen times—viz., ten times in cases of unripe cataract, and three times in very unripe. I have spoken before about one escape of vitreous and one threatened escape. I had only two secondary operations. I had two prolapses of the iris, one by accident and one without known cause, but both ended well; and now I come to the cases in which vision has not been restored. In one case in which there was some loss of vitreous in one eye the wound did not close for about six weeks. There was a negative result. In the other eye of the same patient the wound likewise did not close for upwards of six weeks. She could count fingers at twelve feet when I saw her last, but from what her medical attendant has told me since I fear that vision has diminished. I do not agree with members of the profession who now attribute all to germs, and seem to think if germs were banished we should have no disease at all. The case I have just referred to was one of great want of reparative power. I saw a like case, but a worse one, some ten years ago. The cornea of one eye absolutely would not heal. After several weeks a sort of molecular loss of substance began at the wound, and went on till the cornea was destroyed, leaving a bulging vitreous. I fed him well for perhaps a couple of months, and operated on the other eye; but in this instance there was not slow molecular death, but a quick suppurative ophthalmia. The next case of loss is one of posterior polar cataract. I had performed preliminary iridectomy, and had used Förster's method without apparent effect on the opacity. I afterwards extracted, and everything went well for a fortnight, when an irritation began at the wound, the capsule became thickened, the iris adherent, and the vision diminished quite out of proportion to the external appearances. I found there was loss of retinal sensibility in the lower part. I had operated previously on her brother for a similar cataract with success, but I had previously needled it. Another case of misfortune is No. 41 in my report for 1888. It was a case of cataract of brownish centre, with peculiar yellowish-white striated ring peripherally, whilst the surface of the lens in the pupil was partly transparent. She could count fingers. I thought from previous experience that I might remove this lens without iridectomy, and I did so; the pupil closed by thickened capsule, but she could see bulk. I think if iridectomy had been performed the result would have been different. She may yet be improved. The loss of the eye in No. 28 in the report is one which no skill could prevent. The operation was completed, when suddenly the eye became tense, then iris and vitreous came into the wound, and the patient complained of severe pain. The eye was lost from intraocular hæmorrhage.

I have detailed my failures, and the circumstances. We must always look to advances, and the surest way of making them is to look fairly at the unfavourable cases and not hide or gloss over them; but, on the contrary, give them prominence, and try to face such cases more successfully on a future occasion. As to my successes, three have vision $\frac{2}{3}$ of normal; twelve, $\frac{1}{2}$; ten, $\frac{1}{3}$; three, $\frac{1}{4}$; ten, "excellent," and "very good"; one counts fingers at 12 feet; one, $\frac{1}{8}$; two congenitally blind till thirteen years of age are learning to see.

Now, gentlemen, I have little more to say, but I must give you a caution. You are not to suppose that irrigation and injection are very simple matters, and that anybody can do them straight off as a mere routine affair. Numerous failures of surgeons are doubtless to be charged to this cause. If the corneal section be made above, the surgeon must be prepared for the eye rolling upwards occasionally, and, if this take place, he must be expert in removing the nozzle. Although my losses of vitreous are very small, it is to me very evident that a surgeon who has had no experience may be alarmed by the sudden rolling upwards of the eye.

I have just a little to say on a personal matter. I thought that whatever credit or honour there might be attached to intraocular injection or irrigation I was fairly entitled to it; but I find that now in France there are discussions about priorities, and a large part of some papers and pamphlets is occupied with the subject. But whilst surgeons, doubtless, have injected inside the eye before me, I must claim the initiation, without any previous guidance or suggestion, and the carrying out and giving force and effect to the method of irrigation and injection. When I brought the matter before the profession in Belfast in 1884, in the presence of representatives from England, Scotland, Ireland, Germany, France, and America, not one knew anything or had ever heard of such a thing. A discussion about priority is, however, a compliment to the method and a presage of its value.[1]

ELEVEN CASES OF INTUBATION IN YOUNG CHILDREN.

By W. H. C. STAVELEY,

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(Concluded from p. 949.)

CASE 8.—Thomas G——, aged sixteen months, was admitted to hospital on April 13th. Previous history: Had been under treatment for chronic bronchitis for three months as an out-patient. On admission, at 9 A.M., there were loud snoring rhonchi, and signs of blocking of larger tubes. Fauces congested; no membrane seen. Temperature 99·8°. At 8 P.M. an attack of croupy dyspnœa came on, which increased towards midnight. Restless, and refused to swallow. An emetic was administered through a nose tube, followed by violent cough, and a large piece of membrane ejected without relief. Intubation was performed at 1.45 A.M. on the 14th. After a fit of coughing quieted down and slept well. At 11.30 A.M. recession returned, and inspiration was croupy. An examination was made, and the tube found to have slipped below the level of the vocal cords. It was readily withdrawn by means of the attached string, and a larger tube inserted with relief.—15th: The tube was coughed out at 5.15 A.M.; replaced at 6.15 A.M. Temperature 104·4°.—16th: Breathing rapid, but easy. Taking food freely. Crepitations at left base.—17th: Condition unaltered. Temperature 102·6°.—18th: Tube coughed out at 5 A.M.; replaced at 5.50 A.M.—19th: Tube coughed out at 2.15 A.M.; replaced at 3.15 A.M. Large quantity of mucus expelled. Coughed tube out again at 10.10 A.M.; replaced at 11 A.M. Much glairy mucus. At 5.40 P.M. the breathing was very bad; constant cough, with much rattling in chest. Tube removed, and tracheotomy performed, with great relief. Coughing ceased, and the child fell asleep. Temperature 105°.—20th: Died at 9.15 A.M.—*Remarks:* Necropsy refused by the parents.

CASE 9.—Mildred M——, aged four years and six months, was admitted to hospital on April 20th. Previous history: Under treatment as an out-patient for strumous ozæna for six months. Had never had any difficulty in breathing until the day previously to admission, when she awoke at 4 A.M. with much stridor and rapid breathing. Emetics were administered without relief, and during the evening she became very blue. On admission, at 4.30 P.M., the patient was breathing very rapidly, with stridor and retraction of ribs; colour and pulse good. Glands at angle of jaw enlarged; tonsils not enlarged, and no membrane seen. Temperature 99·4°. She was placed in a steam tent, and rapidly improved, the stridor diminished, and retraction disappeared. At 11 P.M. the dyspnœa returned, with marked stridor and retraction. An emetic was administered, followed by free vomiting, but very slight relief. At 12.30 (midnight) she became somewhat cyanosed, the retraction was very marked, and respiration rapid; sweating profusely. Intubation was performed, with immediate and complete relief. Temperature 99·4°.—21st: Slept seven hours and a half. The tube was coughed out at 12.45 (midday), and a definite piece of membrane was found in the lumen. Breathed well until 2 P.M., when dyspnœa returned, and the tube was

[1] In my desire to make a convenient syphon arrangement without the ordinary disadvantages of the syphon, I overlooked the law of hydrostatics that the pressure of the water would just be the same without the syphon-tube, for the pressure depends only on the depth and density of the liquid, and not on its quantity. The syphon-tube may therefore be dispensed with.

replaced. Temperature 103·2°.—22nd: Slept ten hours. Numerous small pieces of membrane coughed up. Temperature 102°.—23rd: Breathing quite easy, the child bright and lively.—The 25th: Tube was coughed out at 6 A.M., and was not required again.—May 17th: Sent out well with exception of slight difficulty in swallowing and some hoarseness of voice.—*Remarks:* Intubated twice. The tube, twice coughed up, was worn three days and a half altogether. When last seen the voice was still slightly hoarse; there was also some paralysis of the soft palate.

CASE 10.—Frederick S——, aged sixteen months, was admitted to hospital on May 8th. One sister was admitted here on May 1st with nasal diphtheria. Previous history: Eight days previously to admission he was sick, had constant cough, and aphthous patches were noticed on the tongue. On the morning of admission his breathing became stridulous, he became blue once, and the mother stated that he was suffering from whooping-cough. On admission he presented the appearance of an ill-nourished child, suffering from frequent croupy cough, but with no definite paroxysms resembling pertussis. Occasionally there were slight retractions of the lower ribs, and much falling in of the episternal notch during inspiration. The tongue was covered with aphthous patches; one small follicular patch on the right tonsil; glands enlarged at the angles of the jaw. Temperature 99°. Tracheal breath sounds were conducted all over the chest.—9th: Constant cough, occasional attacks of dyspnœa, during which patient cannot lie down. No membrane seen.—10th: Condition unaltered in the morning, but towards evening he got much worse, refusing food and was fed by the nose. At 10.45 P.M. he had not slept all day; constant cough, restless, expression anxious, sitting up and clutching at the sides of the bed. Marked stridor and retraction; no cyanosis. Intubation was performed, with complete relief, after a fit of coughing which lasted ten minutes; he then fell asleep and passed an excellent night; took food well.—11th: At 1 P.M. much rattling below tube, so removed, cleansed, and replaced after half an hour's interval. Did not take food so well, but slept continuously, breathing quite easy.—12th: Passed a good night. Tube coughed out at 11.30 A.M. Definite membrane on tonsils; breathing very stridulous. Tube replaced at 11.40 A.M. Temperature 102°.—13th: Breathing quite easy, but general condition very feeble. Temperature 102·4°.—14th: Died, with no return of dyspnœa, the tube *in situ*.—*Remarks:* As in Case 1, intubation completely relieved the laryngeal symptoms. Permission for a necropsy was refused.

CASE 11.—George H——, aged five, was admitted to hospital on April 30th. Previous history: Had measles recently, and suffered from sore eyes ever since. On April 28th "seemed poorly and had a bad cough," and during the afternoon of the 30th had an attack of dyspnœa and became blue. An emetic was administered without benefit. On admission (9.15 P.M.) a fat boy, with livid face and blue lips, sweating profusely, crowing inspiration and marked retraction. No membrane seen, cervical glands enlarged. Temperature 102·6°. Intubated immediately, and after vomiting some blood-stained mucus and a violent fit of coughing quieted down and colour returned. 10.10 P.M.: Tube coughed out. Dyspnœa returned, and tube replaced at 10.23 P.M.—May 1st: Passed a good night. The temperature rose to 104°, and a profuse measles rash appeared. Trace of albumen in urine. 5.30 P.M.: Tube coughed out, and was not required again.—4th: Albumen disappeared.—7th: Acute follicular tonsillitis.—10th: Some fine shreds of doubtful diphtheritic membrane coughed up. Urine, one-sixth albumen.—21st: Albumen again disappeared.—25th: Sent out well.—*Remarks:* In this case there was extreme dyspnœa urgently requiring relief, and completely disappearing after twenty hours' intubation. The dyspnœa was probably due to the laryngitis of measles, but the somewhat persistent albuminuria and the doubtful shreds of membrane made the diagnosis uncertain. Out of eleven cases, ten of which were undoubtedly diphtheritic and one doubtful, though suffering from extreme dyspnœa, there were seven deaths and four recoveries. The average age of the fatal cases was sixteen months; the eldest was aged two years and two months; of those who recovered the average age was four years and four months.

In three cases, all of which were fatal, tracheotomy was resorted to, owing to the presence of large quantities of mucus obstructing the tube and giving rise to constant and ineffectual cough, the child being too feeble to expel it. It appears to me that the larger lumened tracheotomy tube gives a better chance than intubation in feeble children when there is broncho-pneumonia present with the diphtheria. The various forms of semi-solid food usually recommended were not used. In no case was any serious difficulty in feeding experienced, and fluid food was given in all. In three of the successful cases the voice was recovered completely at the end of ten days. In one there is still some hoarseness, but there is also slight paralysis of the soft palate, and some difficulty in swallowing. After the tube had been inserted, the string was left attached in all the cases except one, the free end being secured to the left temple with a piece of strapping, and not withdrawn, as usually recommended. The hands were fastened to the side of the bed with a flannel bandage of sufficient length to give the child enough liberty to play with its toys and yet not reach the mouth. Usually, the child seemed quite reconciled to the presence of the string after feeling it with the tongue for one or two minutes. The advantage of having it attached was found in Case 8, where the tube undoubtedly slipped below the level of the vocal cords, but was readily withdrawn. In one case the string was withdrawn, as the child habitually bit it through immediately after insertion of the tube.

In comparing tracheotomy with intubation, the following is a brief *résumé* of my experience as a house surgeon. With an O'Dwyer's tube, should there be any membrane or collection of mucus exciting cough, in a fairly vigorous child the tube acts as a moderately tight wad, offering just sufficient resistance that an energetic cough causes its immediate expulsion and with it any mucus or loose membrane that may lie below it. Complete relief, which, however, is of very variable duration, follows,[1] due, I believe, to a temporary displacement of the œdema of the cords from the pressure exerted by the tube. A tracheotomy tube, on the other hand, being tied in, no effort on the part of the child can expel it, and the removal of the inner tube is frequently quite insufficient to enable the child to rid itself of the cause of the obstruction, and it is imperative that a skilled nurse or medical officer shall be within call. The brief time required for the insertion of an O'Dwyer's tube, and no anæsthetic being needed, are points which have been fully dwelt on by others. I am also of opinion that the amount of practice required to intubate fairly rapidly cannot be compared with that required for tracheotomy. Against this, however, is the fact that two assistants are absolutely essential in intubation—one to hold the child and another to steady the head and control the gag. I do not think too much stress can be put on the importance of the patient's body as well as head being held fair and square before the operator, the head being neither fully extended, which causes the larynx to be so much less easy to reach, nor yet flexed on the sternum. And last, but not least, when dyspnœa imperatively demands relief, and the patient's friends are assured that the operation does not necessitate the use of the knife their consent is readily and usually cheerfully granted, whereas in tracheotomy consent is often withheld until recovery is at best extremely doubtful. I have to thank the physicians of the hospital for permission to publish the notes of these cases.

P.S.—Since the above paper was written, five more patients have been intubated for diphtheria by my colleague, Dr. W. W. Ord, and myself, three of whom recovered and two died. This brings the number of cases up to sixteen—seven recoveries and nine deaths. The average age of the fatal cases was under two years, and of those who recovered five years.

THE WINTER CLIMATE OF THE NILE.

BY THOMAS SAVILL, M.D. LOND., M.R.C.P.

HAVING made three trips up the Nile the winter before last, two to Wady Halfa and one to Assouan and back to Cairo, and having taken observations on various points connected with the climate, it occurred to me that such records might be of use to those interested in the subject of winter climates.

The part of the Nile which is most accessible in times of peace and most attractive to tourists lies between Cairo and Wady Halfa (second cataract), between 22° and 30° north latitude, a distance altogether of 800 miles. The river winds a

[1] See Recent Observations on Intubation, by Dr. Francis Huber: Archives of Pediatrics, No. 61, January, 1889.

great deal; it is broad, and in the winter months shallow, and its bed consists of an ever-shifting alluvial mud mixed with a small quantity of sand. The banks consist chiefly of the same material, which has been brought down by previous floodings of the river, and they form a cultivated strip on either side of the river, varying in breadth between a few hundred yards and in places several miles. Beyond these fertile areas, on each side, is the arid sand of the desert, occasionally broken by rugged limestone or sandstone hills.

The vegetation, besides agricultural produce, consists chiefly of palm trees, acacia and carob-bean trees, sugar-cane in large quantity, and a few orange and lemon groves in the neighbourhood of Luxor.

Daily observations were made on the following points. The height of the barometer each morning about 9 o'clock; the maximum, minimum, and mean temperature of each twenty-four hours; the rainfall; the relative proportion of cloud and sunshine each day, roughly estimated; and the force and direction of the wind. The percentage humidity was calculated once, twice, or thrice a day at irregular hours between 7 A.M. and 11 P.M. (most frequently at 9 A.M. and 3 P.M.), and occasionally the fall of the temperature immediately after sundown. I will first give the particulars of the observations on these various points, and then a few general remarks on the climate of the Nile from an invalid's point of view.

The *barometric* readings were not corrected to sea-level, but since the level of the Nile varies very little it may be taken that not much correction is needed. It may be stated, I believe, that the climate of Egypt in the winter presents longer spells of fine weather than any other within the same distance from London. Now it is generally supposed that a high and steady barometer is an indication of fine weather. Here, then, is a curious circumstance—viz, that out of sixty-four barometric readings in January, February, and March, 1888, on only six occasions did it reach or exceed thirty inches, and it only once reached 30·15. It may be doubted if the instrument was correct, but it had been carefully tested just before leaving England, and there was no reason to doubt its accuracy. The only explanation I can offer is, that the remarkable dryness of the desert air, as will be seen from what follows, resulted in an increased rarefaction and lightness of the atmosphere.

In January, 1888, the highest temperature[1] recorded in the twenty-four hours was 77°, the lowest 40° (two readings during the night); the average of maximum readings, 70·3°; the average of minimum readings, 47·2; *the average temperature of the month, 60°*. The average fall of temperature after sundown of six readings was 3°, the temperature read one hour before sundown being compared with the reading one hour after. There were four days during this month on which there were slight showers, when we were between Kalabshee and Aboo Simbel, but they seem to have been very local. Eight other days were partially cloudy, fifteen days were bright and sunny. Light to fresh northerly breezes were the prevailing winds.

Forty observations were made during this month on the humidity of the atmosphere, by means of the wet and dry bulb method, and the percentage (saturation being represented by 100) calculated by Glaisher's hygrometrical tables. The highest record of the month was 88 per cent. on Jan. 21st, at Aboo Simbel, and it exceeded 80 on five occasions. The lowest of the month was 34 per cent., at Assouan, and there were eighteen readings below 60. The *average percentage humidity* of the month of January was 62.

Between Feb. 1st and March 11th, 1888, the highest temperature was 100° (March 5th) at Assouan. There were six readings of 90° and upwards, and twenty-four of 80° and upwards. The lowest during this period was 44° at Assiout, and there were nine readings below 50°. The average maximum temperature was 84·5°, the average minimum 54·2°, and the *average daily temperature* between these dates was 67·7°. There were two showers, each of a few minutes' duration, at Luxor in February; but between Feb. 1st and March 11th there were only seven days which were more or less cloudy, the remaining thirty-three were bright and sunny. The prevailing wind in this period also was northerly, fresh during February and strong during March. There were two days of moderate *khamseen*, or desert wind, in February, and two in the early part of March. The average fall of temperature at sundown was 3·8°.

[1] All temperature readings are on the Fahrenheit scale. They were always made in the shade, and the instruments were fully exposed to the air.

In February and the early part of March the highest recorded percentage humidity was 80 per cent. (at Ayat, just above Cairo), but on four occasions the percentage was above 60. The lowest recorded was 24, but there were thirteen occasions when it fell below 40. The *average percentage humidity* during that period, when fifty-three observations were made at all hours of the day, was 49·5.

As we were constantly moving, these readings were taken at different points of the Nile; still they represent the true conditions under which tourists and invalids are placed when visiting the Nile. I was prepared, when going to Egypt, to find a dry and sunny climate, but it far exceeded my expectations in these respects. During the three months January, February, and March there were only four showery days, and only three other days when a few drops of rain fell, which scarcely amounted to a shower; and during the same period of time there were upwards of sixty-five days when the sun was not at all obscured by clouds. It is worth noting also that the rain which fell at Luxor in the latter part of January, 1888, was the first which had been seen since Feb. 11th, 1887. The *mean temperature* for the three months just named was 65·1°, which corresponds approximately with the July and August average in and near London.

It might be thought that so near a river—especially such a broad, shallow one as the Nile, and with its sloping mud banks—the air would be very damp, but the facts show just the contrary. The humidity recorded on the boat on the Nile gives an *average of 53·3 per cent.* (saturation being represented by 100) between January 1st and March 11th, 1888, as compared with an average of 76 per cent. near London at the same time of year, and 60·5 per cent. in July and August, the driest months in England.[2]

As regards quantity of sun, small rainfall, and dryness of atmosphere, winter on the Nile will bear most favourable comparison with any winter climate. But there is another point of advantage in the climate of the Nile during the months of December, January, and February, which would hardly be anticipated, but one on which I would nevertheless insist—namely, the bracing character of the air. The prevailing wind during these months is northerly, and comes therefore from the sea, 500 to 1000 miles away. It has become dried by its passage over desert tracts, and thus derives the quality named; but even in the east and west winds bracing and tonic properties may be observed, which are scarcely to be expected in so warm a climate. It is only the southerly winds which enervate.

The fall of temperature at sundown is justly dreaded by invalids travelling in hot climates, but it is very small on the Nile; and, although it is quite usual to see a low river mist hovering over the banks, no dew was ever observed on the boat at any time. A copious dew is so usual an occurrence in warm climates having clear air and cloudless skies that I was led to speculate on its non-occurrence on the Nile; and the probable explanation is that the atmosphere being so excessively dry the cooling down of the earth's surface at sundown by radiation is unable to reduce the adjacent air to its dew point. This explanation, however, is not altogether satisfactory, else when the air contained as much as 88 per cent. (which it did on one occasion), how is it that there was no dew? The river Nile has at all times an advantage (by no means a small one) over the land in there being less flies, mosquitoes, and dust than there are on shore.

Hitherto I have only pointed out the advantages which the Nile climate possesses, but there are certain disadvantages which ought to be mentioned. Although the fall of temperature at sundown is small, it will be seen that there is a wide diurnal range, and that the nights are often very cold, as low as 40°. The *average diurnal range* of temperature for the three months named was 28·5°, but it was often much more than this. On thirteen occasions the diurnal range amounted to 30° and upwards, on six occasions to 35° and upwards, and once to 43°. The coldest time in the twenty-four hours was always at night, and, as far as could be judged, was between three and four o'clock in the morning. The lesson to be learned from this is, that it is unsafe for delicate people to leave their windows open all through the night. With windows shut invalids are never exposed to the cold night air.

But the most serious disadvantage in the climate of the Nile is the occurrence of the *khamseen* or desert wind. It blows from the S. or S.W. quarter, usually with more or

[2] From observations made by Mr. Edward Mawley, F. Met. Soc.

less violence, and scorches like the blast from a furnace. If it be sufficiently violent, and it is often so, it brings up clouds of fine dust which obscure the view, and find entrance through the finest crevices of dwellings. The guide-books say that it rarely comes till April. This would seem to be not quite correct, and, according to the best information, it makes its appearance for the first time, occasionally in February, but usually about the middle or end of March, and lasts, as its name implies, more or less, during fifty days.[3] It generally blows for three consecutive days at a time, separated by intervals of about three to five days.

As regards the best time of year to visit the Nile, December, January, and February are the most agreeable and healthy months, for then it is not too hot for moderate exertion, and the *khamseen* has not yet begun to be troublesome. October is generally too hot, and the mosquitoes are very annoying. November, which is a very nice month in Cairo, is said to be not so dry on the Nile; but January and February, which are often chilly or damp in Cairo, are undoubtedly the pleasantest months of the whole year on the Nile. The latter end of March and the month of April are not very agreeable either at Luxor or on any part of the Nile, for it is beginning to get too hot. Moreover, the *khamseen* winds usually begin to blow about this time, and I have often heard inhabitants and English residents say that they greatly prefer the summer months, in spite of the heat, to the month of April on this account. The *khamseen* is said to be felt less in Cairo, and if so it is quite possible, though not agreeable, to stay in the city until the middle or end of April.

With reference to the relative merits of the different parts of the Nile, it is remarkable what few local variations there are over a distance of 800 miles from Cairo southward, probably on account of there being no very high mountain ranges. It is this fact which, combined with the proximity of the desert, doubtless accounts for the small amount of rain. Perhaps the most equable and lovely climate on the Nile, or, indeed, in any part of the civilised globe, is the climate of Luxor. Assouan, surrounded by hills on nearly every side, is undoubtedly the hottest part of the Nile north of the second cataract, much hotter than Wady Halfa, although the latter is situated 200 miles further south, and well within the tropics. Cook's new tourist steamboats are replete with every comfort, and afford a good opportunity of seeing the Nile, but invalids ought not to undertake the excursions at the various stopping places except under the strictest medical supervision. The difficulties of catering are no doubt very great, and it is almost impossible to procure liberal supplies of fresh milk and butter. The only hotels on the Nile are at Assouan and Luxor, and the latter is most frequented by invalids.

The winter climate of the Nile may be summarily described as exceedingly dry, sunny, and mild, the air having a far more bracing property than is to be found in most warm atmospheric conditions. During the winter of 1887–88 very severe weather prevailed over the whole of Europe, but it did not trouble Egypt. Here there was scarcely a drop of rain, and a delightful temperature all the while.

The cases most suitable for treatment are incipient phthisis and rheumatism. The dryness is especially suitable to the latter, and I have seen wonderful improvement take place in rheumatic affections of the muscles and joints. From the cases of phthisis (in an early stage), asthma, emphysema, and other chronic lung affections observed while there, I should say that all of these affections may derive benefit from this climate; but it is the martyr to chronic rheumatism who finds a veritable elysium in Upper Egypt. It is, of course, questionable if any climate will avail when organic changes have taken place in the osseous structures of the joints, but even in these cases the pain may be lessened and the joints become more supple.

There are some sulphur baths at Hammam Helouan, near the Nile, a few miles out of Cairo, which have some reputation in the treatment of rheumatism, but I am not in a position to form an opinion on their effects apart from the climate. Gouty subjects, where strict dietetic regimen is of so much importance, would perhaps do better in Cairo, for circumstances do not admit of a strict dietary table being adhered to on the river; but in Cairo there is no difficulty on this score.

The clothing best suited is that worn during an English spring. No one should go without a good warm overcoat, for the evenings are often chilly. As for amusement, there is more than enough for the lover of history, archæology, and the study of a simple-minded race; and there is also abundance of water sport. The Nile water should never be drunk unless previously boiled and filtered, otherwise the risk of diarrhœa and zymotic disease is incurred.

Paddington Infirmary, W.

[3] *Khamsa*, Arabic, fifty.

FIBRINOUS BRONCHIAL CASTS IN THE SPUTUM OF ACUTE CROUPOUS PNEUMONIA.

BY ERNEST S. REYNOLDS, M.D. LOND., M.R.C.P.,
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THE following case may be of interest on account of the rarity of the appearance of bronchial casts in the sputum of acute croupous pneumonia.

David C——, aged forty-five, cabman, was admitted to the Manchester Royal Infirmary, under the care of Dr. Bury (who has kindly allowed me to report the case) on April 20th, 1889. He was found to be suffering from typical croupous pneumonia affecting both lungs, which, according to the history, was of one week's duration. The signs and symptoms were in no way peculiar, except that the face was rather more purple than is usual in such cases. His temperature was 104·6°, respiration 54, and pulse 104, irregular in force and rhythm. In spite of a free administration of stimulants, he became rapidly weaker, and died on April 24th at 4 A.M. On the morning of the 23rd it was noticed that the sputum was of a most unusual character. Up to then it had been viscid and rusty, but now it was found to be somewhat more fluid, still rusty, but that floating at the top were many worm-like masses exactly like cooked macaroni. The patient was also seen to expectorate these after considerable difficulty. They were removed from the rest of the sputum and floated in water, when they were found to be most beautiful and perfect casts of the bronchial tubes. Though some were smaller than others, yet the great majority were as follows. They were about six inches in length from the broad end to the finest ramifications, and seemed to be of much the same shape, as if they had all come from a particular system of tubes. The main stems were made up of three or more segments, about a quarter to three-eighths of an inch wide and an inch to an inch and a half long, joined together by narrower constricted and short necks. From these constrictions secondary long branches arose, which divided almost dichotomously, and finally ended in very fine filaments. The main stem also by a rapid division near the end divided into secondary branches, which also terminated in many fine filaments. The masses were of a beautiful white colour, just tinged with yellow, and on a few spots a distinctly rusty appearance was noticed. They were very firm in consistence, and could not be broken up with the finger. The fine terminal filaments were solid, but the larger stems appeared to be formed of irregular concentric layers, with a central core full of air. On microscopic examination the mass was found to consist of pure fibrine, and no cells could be seen, except a few red blood-corpuscles in the part which was of a rust colour. Probably about thirty of these casts were coughed up in all. The patient's wife told me that some years ago he had an attack of pneumonia, and she thinks that then he also coughed up some of the same material. She said that he had never had such symptoms as I described to her would have been present in plastic bronchitis.

At the post-mortem examination I found the lungs most extensively affected with pneumonia, the left lung showing red hepatisation in the upper lobe and grey hepatisation in the lower. The right lung showed grey hepatisation in the upper lobe, red hepatisation in the middle and upper part of the lower lobe, and the lower part of the lower lobe was congested, but unaffected with inflammation, and contained air. The bronchial tubes of both lungs were opened up as far as possible with scissors, but no casts could be found *in situ*. They contained a small quantity of muco-purulent material. The walls of the bronchi were congested, but otherwise appeared

healthy. On squeezing the consolidated lower left lobe, however, a few small branching casts were expelled. The pleuræ were both rather firmly adherent from old pleurisy. The right side of the heart was much engorged, and a firm ante-mortem clot was found in the pulmonary artery, extending for a considerable distance into the branches of the right and left divisions. This curious condition of the sputum seems to be very rare. Personally I have never seen it before, though I have examined nearly two hundred cases of pneumonia since 1886; indeed no case of expectoration of bronchial casts has occurred in any of the 4500 cases of all kinds admitted to the medical wards of the Manchester Royal Infirmary since January, 1887.

Jürgensen in Ziemssen's Cyclopædia of Medicine and Lépine in the "Dictionnaire de Médecine et de Chirurgie pratiques," in speaking of the expectoration of pneumonia, both state that Remak[1] first discovered small, almost microscopic, ramified cylinders, casts of the finest bronchi. These he obtained by shaking up the sputum with water, when the little greyish-white particles could be easily separated. He thought that they were formed of the fibrine set free by the inflammation. Gubler[2] and Kuss found on the surface of these casts ciliated epithelium cells, and they, together with Grisolle, maintain that the fibrine of the blood plays the most important part in their formation. Lépine, in describing the anatomical varieties of pneumonia, gives one the name of "variété avec moules fibrineux des bronches," and shows that in these cases the bronchi are found filled with solid fibrinous cylinders, even as thick as the finger. These seemed to have been hinted at by Morgagni, but have been more carefully described by Puchett, Lobstein (in children), Reynaud, Nonat, and Rokitansky and Wyts,[3] and the last two specially mention that the widest casts were hollow, and the smallest solid. In the sixth volume of the Transactions of the Pathological Society, four similar cases are recorded by Dr. Bristowe and one by Dr. Wilks, and in the last case there was an absence of respiratory sound over the diseased lung during life. Lépine also mentions that they are described very fully by Grancher as filling the bronchi of a lung up to the hilus in a case of pneumonia of five days' duration; here the irregular concentric arrangement of the large casts is noticed, and compared to elder pith from the presence of little hollows filled with air. Schützenberger states that in this variety of pneumonia, the blood always shows a large buffy coat, and that the pulmonary arteries are filled with fibrinous coagula. As seen post mortem, it is not very uncommon to find these large bronchial casts in pneumonia, but the presence of them in the sputum of such a large size seems to be extremely rare.

Manchester.

[1] Diagnost. und Path. Untersuchungen, III. Abschnitt, p. 137, Berlin, 1845.

[2] Concrétions ramifiées fibrineuses trouvées dans les Crachats: Société de Biologie, 2me. série, tome ii., 1855.

[3] London Medical Gazette, 1847.

CELLULITIS OF THE NECK, SPREADING TO THE APEX OF THE LUNG: A SEQUELA OF TYPHOID FEVER.

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PRIVATE J. F—— was admitted to hospital on Oct. 11th, 1887, complaining of diarrhœa, and with a temperature of 104·4°. His illness had commenced five days previously—very shortly after he had been accepted as a recruit for the corps of Royal Engineers. He had walked from the north of England to London with the object of enlisting in the army. The symptoms of typhoid fever developed, the attack proving a severe one, with high temperature and rapid dicrotous pulse. The presence of rose spots on the abdomen was noted on Oct. 16th, and hæmorrhage from the bowels occurred on the 21st and 24th. The temperature commenced to fall on the 25th, but again showed an ascending scale on Nov. 5th; and, notwithstanding careful feeding with peptonised milk and fluid nourishment, the first normal evening temperature was not registered until the 28th, forty-nine days after admission. Progress was then satisfactory, but a relapse occurred on Dec. 20th, with an evening temperature of 104·3° on the 25th. A fresh crop of rose spots was noted on the 28th. This relapse subsided on Jan. 13th, 1888. A further relapse occurred on Jan. 23rd, the evening temperature registering 104° on the 30th, and a fresh appearance of rose spots being noted on the 31st. This relapse subsided on Feb. 16th. He gained ground in March, and on April 20th he was able to be up all day in the ward. Early in May the skin appeared a little jaundiced. On May 5th the patient complained of sore-throat. On examination nothing was observed beyond a little redness of the fauces. In the evening he complained of his throat feeling more uncomfortable, the tonsils appearing a little swollen. Early on the following morning the medical officer on duty was summoned to see the man in consequence of difficult and noisy respiration which had developed gradually during the night. Poultices were applied to the throat, and he was placed in a tent with a steam kettle. At 10 A.M. the breathing was still noisy from laryngeal obstruction, with dilatation of the alæ nasi, and there was difficulty in swallowing. The skin was rather jaundiced. Five grains of calomel were ordered to be taken, and a warm water enema to be administered. Some fulness was observed on the right side of the neck below the jaw. At 6.50 P.M. the bowels had acted twice. He was now unable to swallow, fluids returning through the nose. The swelling in the neck had rather increased, and the right tonsil was swollen and œdematous. Respiration was much the same in character. Nutrient enemata, with an ounce of brandy in each, were ordered to be given every four hours. Temperature 102·8°; pulse 129. At 11 P.M. the temperature was 103·6°; pulse 146. On the 7th at 2 A.M. the temperature was 104°; pulse 145. At 10.45 A.M. the temperature was 102·6°; pulse 147; respiration 20. The swelling on the right side of the neck had steadily increased, and passed across to the left side. The swollen tissues felt brawny, and this condition was most marked below the right side of the lower jaw. Inability to swallow continued. At 4.50 P.M. the temperature was 103·3°; pulse 140; respiration 24. The swelling was passing down to the front of the chest, and a dark blush was present below the jaw on the right side of the neck. With a view of relieving the tension which evidently existed beneath the layers of deep fascia, I determined, after consultation with my colleague, Surgeon-Major Magill, to make a deep incision in the middle line of the neck in the interval between the jaw and hyoid bone. The fascia having been reached, it was divided on a director. At 11.30 P.M. the temperature was 102·5°; pulse 134; respiration 24. He was now drowsy and inclined to sleep, and his respiration assumed an irregular character. Three deep inspirations, during which a fairly free entrance of air to the lungs took place, were succeeded by four or five shallow inspirations, during which no air passed the larynx; and his face then becoming dusky, a deeply drawn breath followed, to be succeeded by the same alternation of a series of deep and shallow inspirations. On the 8th, at 2.30 A.M., the respiration remained of the same character, and his condition gave rise to much anxiety. The swelling of the neck had, however, decidedly decreased since the incision was made, and he was able to swallow. At 3.30 A.M. an enema, composed of milk, an egg, brandy, and a drachm of spirit of ether, was administered, and a hypodermic injection of ether. It was thought advisable to make the central incision in the neck more free, and a deep incision was made behind the upper portion of the sterno-mastoid muscle, dividing the fascia. An ounce of brandy was ordered to be given by the mouth every hour. At 8.40 A.M. the respiration was much improved. Pulse 112. Shortly after mid-day the temperature was 102·4°; pulse 120; respiration 26. In the evening the temperature went up to 104·8°; pulse 132; respiration 28. The œdema of the neck was subsiding. An ounce of brandy was ordered at intervals of two hours. On the 9th, at 8.15 A.M., the patient was drowsy and respiration catching. Temperature 104°; pulse 114; respiration 30. The œdema of the neck was mostly gone. He had slept from time to time during the night. There had been diarrhœa during the early morning, and a mixture containing carbonate of ammonia with bark and quinine was consequently discontinued. There was evidence of commencing consolidation of the apex of the right lung,—impairment of percussion resonance with harsh respiration. At 1.30 P.M. the temperature had gone up to 105·5°; pulse 132. As the temperature was rising and the pulse increasing in frequency, towels

wrung out of cold water were applied over the chest, abdomen, and legs, and renewed at frequent intervals. Ten grains of quinine were ordered to be given at once, with five-grain doses at intervals of an hour until twenty grains had been taken. At 2.30 P.M. the temperature was 104·4°; pulse 120. At 5.45 P.M. the temperature was 104·3°; pulse 128; respiration remained of the same character. A cold wet pack was applied and renewed at 6 30 P.M. with pounded ice sprinkled over the body and legs. At 7 P.M. the temperature was 103·8°; pulse 116. At 11.45 P.M. the temperature had fallen to 102·6°; pulse 122. On the 10th, at 3.30 A.M., the temperature was 104°; pulse 128; respiration 36. There was some diarrhœa. Ten grains of quinine were ordered, and an astringent draught. At 9.30 A.M. the temperature was 102·4°; pulse 123; respiration 35. The breathing had been very fair during the night. The skin was moist and the man's aspect better. The bowels were loose. The œdema of the neck and chest had almost entirely disappeared. The physical signs of consolidation of the apex of the right lung were more marked. The uvula and fauces remained red. At 7 P.M. the temperature had risen to 104·6°; pulse 122. He had slept well all the afternoon. There was still some diarrhœa. Ten grains of quinine were ordered to be given at once, and to continue the ten-minim doses of tincture of perchloride of iron every four hours which had been commenced in the afternoon. On the 11th, at 8.30 A.M., the temperature records during the night had shown a fall, and the thermometer now registered 101·2°; pulse 98; respiration 28. Astringents had been administered to check diarrhœa. Returning crepitation was audible over the apex of the right lung. At 7.15 P.M. the temperature had risen to 103·5°; pulse 110; respiration 32. Ten grains of quinine had been given in the afternoon. On the 12th, at 8.30 A.M., the temperature had fallen to 100°; pulse 98; respiration 28. He had slept during most of the night. Sputum yellowish, clear, and tenacious. He complained of some pain in the right side of the chest. In the evening the temperature had fallen still lower—namely, 98·5°; pulse 86; respiration 21. He was sweating rather profusely. The tongue, which had been dry, still remained so. He had slept much during the day. From this time he steadily improved. On May 23rd the crepitant râles audible at the apex of the right lung had almost disappeared, and on the 30th he was quite convalescent. On June 8th he was discharged from hospital to join his corps at Aldershot.

Remarks.—This case illustrates well the features which characterise this grave disease, and also the relief of the urgent symptoms which is afforded by incisions made through the cervical fascia with a view of relieving the pressure on the deep structures of the neck. The symptoms and treatment of cellulitis of the neck are so rarely referred to in text-books on surgery that I would in conclusion mention Mr. Croly's paper, entitled "Observations on Diffuse Inflammation of the Areolar Tissue of the Neck (Cellulitis): Importance of early, free, and deep incisions: With practical reference to the Surgical Anatomy of that Region," which was published in the *Dublin Journal of Medical Science* for May 1st, 1873. In this paper he points out "the lines of safety" and "lines of danger" as a guide in making incisions to divide the fascia of the neck. The "lines of safety" are (1) the mesial line from the chin to the interclavicular notch, and (2) the line along the posterior border of the sterno-cleido-mastoid muscle, taking care to avoid the spot where the muscle is crossed by the external jugular vein. Mr. Croly also refers to Mr. Bickersteth's paper on this subject in the "Liverpool Medical and Surgical Reports," vol. iii., Oct. 1869. A recent paper by Surgeon G. H. Young, A.M.D., will be found in the *British Medical Journal* for 1884, vol. i., page 1141.

Guards' Hospital, Rochester-row, S.W.

LONDON LOCK HOSPITAL.—A special effort is being made to raise £1000, and so to free the London Lock Hospital and Asylum, Harrow-road, W., from debt by the end of the present year. The Hospital and Asylum are under one roof and under the same governing body, and the Asylum has been the means of rescuing from a life of shame thousands of poor women and obtaining for them suitable occupation. As the Lock Hospital and Asylum have no investments and no endowment, an earnest appeal is made to all interested in "rescue work" to enable the much-needed £1000 to be raised, and so to end the year 1889 out of debt

LEPROSY IN KASHMIR: ITS DISTRIBUTION AND ETIOLOGY.

BY ERNEST F. NEVE, M.D., F.R.C.S. ED.,
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(*Concluded from page 901.*)

IN its early stages leprosy may be recognised by certain integumentary changes or by anæsthetic patches. One looks instinctively to the forehead, especially the superciliary ridges. If leprous, the skin is somewhat thickened in this position, dusky in colour, but not necessarily irregular. The hair of the eyebrows is scanty. Sometimes the forehead is free, and on the face a raised, slightly indurated, reddish area, perhaps on one cheek, is the only sign. In this case the differentiation from syphilis is not always easy. But even here, in a certain proportion of patients, impairment of sensation of the feet and legs will be found. Speaking broadly, there are two main types of leprosy in the Valley—the anæsthetic and the tubercular. I have seen one striking case of macular leprosy with a wide area of circular patches varying in size from a farthing to a five-shilling piece, and darkly pigmented at the borders. Anæsthesia was, however, associated, and not unfrequently one may see patients presenting at one and the same time anæsthesia, macules, tubercles, and ulcerations of soft tissues and bone. It is distinctly more common to find a patient with anæsthetic patches, but without tubercles, than the converse. Take, for example, the case of A. M——, a patient who was under my observation for more than two years. About five years ago his sciatics were stretched for anæsthetic leprosy. Since then there has been no new manifestation of the disease. His general health improved, and he was regarded as practically cured, not, I believe, by the nerve stretching, which only alleviated and favourably modified the disease in the lower extremities, but by the assertion of the vitality of the tissues over the morbid elements. This patient died quite recently from acute but obscure symptoms—possibly a perforating ulcer of the stomach or intestines.

Anæsthesia seldom remains for any length of time uncomplicated. Blisters are apt to form, and then local death of tissue and ulceration. This process is no doubt partly trophic. Perforating ulcer of the sole is a common and early symptom in leprosy. Wide tracts of superficial ulceration are often observed on the sides of the legs and forearms. Two seats of election are the outer aspect of the leg over and immediately below the head of the fibula, and over the ulnar aspect of the upper third of the forearm. Exposure to friction partly determines these spots; but withdrawn nerve influence is greatly concerned, as the beneficial results of nerve stretching demonstrate. In later stages the quiet necrosis of phalanges is probably due to the same cause. Portions of bone removed by operation are spongy, and appear to have undergone a process of rarefying osteitis. In all these cases the nerves supplying the part are found on clinical examination to be thickened and sometimes tender; while if inspected, as in nerve stretching, the trunks are markedly enlarged, and usually pink and of firm consistence. If a portion be excised, a great excess of fibrous tissue is demonstrable by the microscope. Apart from the observations of Tschiriew[1] on the Morbid Anatomy of the Spinal Cord in Leprosy, showing atrophic changes, there seems every reason to suppose on clinical grounds that the spinal cord sometimes participates in this change. For stretching of one sciatic nerve is found occasionally to favourably affect the sensation of the opposite side. The nerves most often involved in leprosy are, in order of frequency, the sciatic, musculo-spiral, ulnar, and median. In the earlier stages hyperæsthesia and burning pain are often referred to the area of distribution of one of these. The changes in reflexes in leprosy are essentially of the nature of diminution. Superficial reflexes disappear early. If the eye is affected the conjunctival reflex becomes increasingly impaired. Ankle-clonus can but rarely be elicited. I have examined the knee-reflex quite recently in seven cases. Of these, four were advanced cases. In three the reflex was greatly diminished. In one not impaired on one side but dimi-

[1] THE LANCET, vol. i. 1880, p. 731.

nished on the other. In three other less advanced cases, two showed marked diminution. One patient, however, had well-marked knee reflex on both sides. In advanced cases marked muscular atrophy occurs. This is often very evident in the interossei of the hand, and there is a tendency for the hand to assume the "griffin claw appearance." The resemblance to the condition in progressive muscular atrophy is sufficiently striking to suggest affinity in point of central lesion. At the same time the distortion of the hand is apt to be accentuated by morbid changes (attended with loss of substance) in the sheaths or substance of the tendons. Muscles, also, and their sheaths undergo change. In stretching the sciatic nerve the consistence of the biceps is often found to be altered. In some cases its substance is friable, and it is glued by adhesions to the cellular tissue around in such a way as to render definition difficult. Associated with this, healing power is distinctly below par. Then when anæsthetic leprosy is well established in addition to the deformities from loss of tissue and cicatrisation, the skin as a whole shows peculiarities: a dried parchment-like epidermis often traversed by lines at angles gives the surface a fish-scale-like appearance. There is in fact a condition of leprous ichthyosis. The tubercular form is apt to be distinctly more severe. For one reason, it often coincides with the anæsthetic, being superadded. When tubercles are appearing or spreading there may be elevation of temperature. At an early period the face becomes distorted, with elevations from one to three or four lines in diameter, especially affecting the forehead, nose, and auricles, producing the characteristic leonine appearance, but scattered also over the limbs and, indeed, the whole body. At first the epidermis is not implicated. This process is not confined to the skin, but affects the mucous membrane of the palate, pharynx, nose, and alimentary tract, accounting thus for obscure digestive disturbances. The larynx is sometimes implicated. On one patient, now in the wards, a year ago I had to perform tracheotomy for tubercular leprous lesion of the aryteno-epiglottidean folds. Even the eye does not escape. A patient lately in the hospital showed gradual progress of a tubercle from under the conjunctiva at the outer margin of the cornea, extending towards the centre with convex pink fleshy-looking edge, involving and fixing the iris.

Tubercles are more apt to ulcerate through the mucous membrane than at the skin surface. As far as the skin is concerned, where ulceration occurs it has appeared to me to arise as an area of softening and pus formation under the epidermis. Again, apart from actual tubercles, the hair-follicles seem to suffer, for the hairs become pale, brittle, and scanty. Clinically, I am inclined to think the sebaceous and sweat glands are also attacked, for there is a marked tendency to dryness and harshness of skin, with utter absence of secretions. Enlarged lymphatic glands can frequently be detected. In one such excised I failed to demonstrate the bacillum. With regard to complications, they are certainly not common. Antecedent syphilis no doubt influences ulcerative processes to a certain extent. I have recently seen a leper whose ulcerated throat I think illustrates this. One leper now in the wards had an epithelioma following a burn.

As treatment, iodoform, iodide of potassium, mercury, arsenic, quinine, phosphate of soda, and mudar root have been tried internally, while balsam of Peru and gurjun oil have been rubbed on externally. Carbolic acid and iodine have been used for wounds, nerve stretching has been adopted for anæsthesia and trophic ulcers. None of these is a specific. Lepers react well to generous diet. If we inquire into the Japanese "Goto" treatment, which is claimed as a cure,[2] we notice how large a part good diet plays. The bath treatment there recommended is also calculated to be valuable in a disease in which skin secretions are so disordered. But the polypharmacy of Dr. Goto rather shows that he also has hitherto failed to discover a drug specific. So far no remedy has been discovered which modifies the course of leprosy in a manner analogous to the effect of iodide of potassium and mercury salts on syphilis. Phosphate of soda appears to be of some value in doses of twenty to forty grains twice daily. Lately the mudar root (Calotropis gigantea) has been tried. It is a drug not dissimilar in its action to ipecacuanha. In doses of five to ten grains it acts as a diaphoretic. It has a certain reputation in India for leprosy. Its action appears to improve the condition of the skin. Hydrocotyle asiatica[3] has also a similar reputation. Leprosy is, however, so irregular in its progress and so prone to become temporarily arrested that the results of drugs the administration of which does not produce early and definite improvement have to be accepted with caution. Especially is this the case with chaulmoogra oil. Distinct improvement follows the external application of gurjun oil, but copious dilution with sweet oil does not appear to detract from its activity.

Nerve stretching is most valuable as a palliative. During the past few years more than two hundred and seventy nerves have been stretched in this hospital,[4] representing about one hundred cases of leprosy. Great improvement is often obtained in the tracts supplied by the nerves; but we cannot anticipate improvement in the face and parts supplied by cranial nerves, neither do we observe it. However slight the risk of contagion may be, I am emphatically in favour of segregation. Marriage should certainly be discouraged. In other respects lepers should be placed in easy comfortable circumstances, with good food and no hard work.

Kashmir.

[2] Ibid., vol. i. 1887, p. 39. [3] Ibid., vol. i. 1885, p. 444.

[4] Ibid., vol. i. 1886, p. 1070; vol. ii. 1886, p. 325. Edin. Med. Journ., Nov. 1884, p. 433.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

COLOTOMY BY GUNSHOT WOUND; FÆCAL FISTULA; RECOVERY.

BY A. VAUGHAN BERNAYS, B.A., M.B.CANTAB.

ON July 9th, 1889, I was hastily summoned to G. G——, aged thirteen, who had received a gunshot wound in the back while shooting blackbirds with his brother. I found the lad in bed, with no appearance of shock about him, but complaining chiefly of pain in the left inguinal region, radiating down the left thigh, probably due to irritation of the lumbar plexus. On examination I found a wound exactly midway between the centre of the crest of the left ilium and the last rib, penetrating in a funnel-shaped manner forwards and slightly outwards. On the surface it was about two inches and a half across, but it narrowed so as to barely admit the point of the finger at the bottom. The skin and the surface of the wound were blackened and burnt, owing to the fact that the gun was actually touching the boy's back when it was discharged. On making inquiries I found that, fortunately having run short of the "sinews of war," the gun contained barely a third of the ordinary charge. Placing the boy under chloroform, I succeeded in extracting several shreds of jacket and about a score of shot, and I made out clearly from the direction of the wound that the colon was probably injured, even if the cavity of the abdomen had escaped. The lad did well generally, his temperature never going beyond 101°, and became normal within the week. On the third day the patient's bowels, which had been somewhat confined before, were moved, and about a dozen shot appeared in the motion; at the same time the discharges from the wound became fæcal. This continued for about a fortnight, and then gradually ceased, the wound healing slowly. No treatment was adopted, save daily irrigation with weak carbolic and the insertion of a drainage-tube for the first few days. The case seems to me to be interesting, not only on account of the rarity of such a method of colotomy, but as illustrating the resistant power of fæces, the fact of the colon being loaded undoubtedly saving the patient from the serious risk of penetration of the abdominal cavity.

Solihull.

MENTAL SHOCK PRODUCING FALSE CONCEPTION IN A PREGNANT WOMAN.

BY ALLAN MINNS, L.R.C.P. Lond.

MRS. C——, a woman aged forty, the mother of several children, all born healthy, came under my treatment about eight months ago for profuse loss from the uterus. Upon examination the uterus was found to be slightly enlarged

and somewhat tender on palpation. The losses continued for the space of a fortnight and then ceased, but the patient was still in a low state. She gradually became stronger until the beginning of February of the present year, when the uterus was about the size of a cricket-ball, and she would be about three months advanced in pregnancy. At this time a niece, who had only parted from her two days previously, and to whom she was much attached, committed suicide by drowning herself in the river, for no apparent cause. The news of this acted upon Mrs. C—— as a severe shock. I was summoned to her, and found her in a state of great collapse, from which she was with great difficulty aroused, and did not wholly come out of it for several days. Small hæmorrhagic discharges were now of daily occurrence from the womb, and examination showed that the womb was enlarging and the os slightly ulcerated. By the administration of ergot and tannin, alternated with iron and acetate of lead, the hæmorrhage was checked, but kept breaking out at intervals of a fortnight or so.

On the morning of Aug. 5th the woman had pains, which proved to be labour pains, accompanied with great loss of blood, and at 5 A.M. she passed a mass, which upon examination proved to be the degenerated fœtus and placenta—one mass of fat and globules. Upon examination, the interior of the uterus was found to be covered with soft, adherent particles similar to the mass which had been extruded. These were removed with the finger and the parts well washed out with Condy's fluid and water, and absolute rest enjoined. The case has since run an altogether normal course, no bad symptoms having arisen.

This case was extremely puzzling to diagnose; several examinations were made, externally and per vaginam, but nothing definite could be made out, and the last examination, conducted on the day prior to the confinement, led me to think that it was a case of placenta prævia; but the uterus, though large, was easily and perfectly malleable, very soft, no tumour such as fibroid or anything of a like nature to be discovered, and the only diagnosis, the correct knowledge of the state of affairs, was furnished by nature when the mass was expelled. From the early examination I was led to think that all would have gone well had not the system received so rude a shock by the sudden announcement of the suicide of her niece.

Thetford, Norfolk.

ON A CASE OF SUDDEN UNEXPECTED DELIVERY IN A PRIMIPARA.

By WORSLEY J. HARRIS, M.R.C.S., L.R.C.P., &c.

CASES of very rapid delivery with no symptoms of any kind to give warning of the approach of labour are sufficiently rare to be worthy of record. I think the following case will be interesting in showing how rapidly and unexpectedly the uterus, without any apparent reason for so doing, will empty itself of its contents.

M. C——, aged twenty, a single woman of robust health, about five feet three inches in height, well developed muscles, broad hips, and pelvis shallow and capacious, was, according to her own reckoning, eight calendar months pregnant, and expecting delivery in a month's time. One morning at 10 A.M., while doing her usual routine of house work, which was that of a woman in the lower ranks of life, she felt sick and giddy, so went up into her bedroom to lie down. After lying for about five minutes she was seized with an irresistible desire to defecate, and rushing to a night stool in the adjoining room was immediately delivered of a small but well-formed male child. There being no one in the house, she severed the cord, but left the child in the commode, and then went and lay down. No one came to the house for an hour, when, the baker's boy calling, she asked him to run for a friend, an old midwife, who came and took away the placenta. The case occurring in the country, and some five miles away, I did not get the message until 4 P.M. When I got to the patient's house I found the girl undressed and in bed, and in every way doing well. The uterus contracted; no hæmorrhage; no laceration of perineum. In the night stool was a well-formed but small male child, situated with its head downwards, the occiput anterior and inclined slightly towards the left side of the commode, with forehead posterior and to the right. The shoulders, too, presented in the left oblique diameter of the night stool (if I may be allowed to use that expression); the thighs and knees were flexed. There was about a pint and a half of mixed blood and liquor amnii, in which the child's head and face were buried. I found the placenta entire and healthy in a separate utensil.

Post-mortem examination of the child.—Sixteen inches long, four pounds and a half in weight. The child slightly but beautifully formed; no marks of bruising or injury anywhere; dark hair on head; no membrana pupillaris; pupil midway between contraction and dilatation; face and lips somewhat blue and congested; nails formed, and reaching to the tip of the fingers and toes; umbilicus between a quarter to half an inch nearer to the pelvis than to the ensiform cartilage; the liver, heart, spleen, and kidneys were normal; the lungs were perfectly consolidated, without the slightest sign of an air-vesicle; with various trials they sank in water.

I think that the position in which the child was situated in the night stool goes a long way to prove the truth of the mother's story. For it is not at all likely that the mother, and especially an inexperienced woman as this one was, would have placed the child in such a truly natural position. And then, again, the tendency of the occiput to the left and forehead to the right and the position of the shoulders in the left oblique diameter (so allow me to call it) of the night stool would seem to point to the fact that the child presented originally in the first cranial position, and that it had passed through the parturient canal without any decided rotatory or adaptive movements, and this would be for the most part likely to occur in a case with rapid and strong uterine contractions, and a broad, shallow, roomy pelvis. The post-mortem examination showed that the child was about an eight months' fœtus; it was in every respect well formed, and if it had been given a chance to breathe it would probably have lived.

Blackheath.

A STRANGE CASE OF MALINGERING.

By GEORGE THORPE, L.S.A. LOND., &c.

M. C——, aged seventeen, a plump healthy-looking country girl, in service in a minister's family, was brought to me by her mistress, about the end of March last, complaining of severe pricking pains on the dorsal surface of the left hand. Her mistress informed me that the girl was not at all fond of work, and that she had a deal of trouble to get her to do it; that since the hand had been bad, she would do nothing but sit down and cry. On examination of the hand I found it puffy and inflamed, and on asking if she felt the pricking sensation at any particular point, was referred to a spot in the centre of the hand. On touching this with my finger I distinctly felt something sharp and pointed. I used a pair of dressing forceps and extracted a full-sized sewing needle, which had been pushed obliquely into the flesh until the whole of it was out of sight. She could give no account of how it got there. Three evenings afterwards she was again brought in, and from the same place and in the same manner I extracted another needle. About a week after she came again, and this time I withdrew a pin (which had been pushed in until the head was covered) from the same place. A few days after she came again, with her hand (of course previously inflamed from her treatment of it) very œdematous and of a bright-blue colour, which I found she had produced by a liberal use of the blue bag and vinegar. I felt so disgusted with her that I advised her mistress to get rid of her at once, which was done, and the girl returned to the country. It seems hardly credible that a person of her age could be so cunning, and would inflict so much pain upon herself to avoid work.

Walthamstow.

THE INFECTIOUS DISEASES NOTIFICATION ACT.—At a meeting of the Council of the County Borough of Cardiff, held on Saturday, Nov. 9th, a resolution was passed "That the Infectious Diseases Notification Act, 1889, shall be adopted in the districts of the urban and port sanitary authorities respectively, and that the said Act shall come into operation on December 16th next."

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

EVELINA HOSPITAL FOR CHILDREN.

CASES FROM THE SURGICAL OUT-PATIENTS, WITH REMARKS.

(Under the care of Mr. FREDERIC S. EVE, Surgeon to out-patients, and Mr. LEONARD A. BIDWELL, Registrar.)

HÆMOPHILIA has well been described as the most hereditary of all diseases, and presents very many aspects of great clinical importance; one of the most interesting of these is the occurrence of joint swellings in those who are the subjects of this diathesis, and we give below an interesting example, in which these joint swellings were very marked. In this case the earlier affections of the joints appear to have been of traumatic origin, but no evidence of injury was offered when the later affections developed. According to Dr. Wickham Legg,[1] the joint affections which are found in hæmophilia first appear between the seventh and eighth and the thirteenth and fourteenth years of life; there is, however, a case on record where swelling without apparent cause first developed in the elbow-joint of a child eighteen months old. This case also bears out an observation by Dr. Legg that the swelling of the joints is often a more marked feature in the disease than the bleeding; he also says it is commonly the result of exposure to cold, being especially frequent in the spring and autumn or in sudden atmospheric changes. The resemblance of these swellings in the joints to those produced by subacute rheumatism is well known, and without a history it is almost impossible to diagnose them. Howard Marsh[2] says they "are the result of synovial hæmorrhage; these hæmorrhages produce more or less articular swelling (which, although it usually slowly subsides, is sometimes permanent), and are followed by a low form of inflammation and the development of adhesions, by which movement is limited; and also by degenerative processes, consisting of fibrillation and absorption of the cartilages, and other changes closely resembling those met with in osteo-arthritis." The pathological changes met with in the joints of those who have died from this disease are not often seen in our museum collections; perhaps the best examples are those in the museum attached to St. Bartholomew's Hospital. As regards treatment, rest, with the application of cold, is usually sufficient to produce a cure, and suppuration is not a complication to be feared; the surgeon should, however, be on his guard to prevent the formation of adhesions in the joint, and careful not to employ violence in breaking them down should they have already formed.

CASE 1. *Hæmophilia.*—Joseph B——, aged five years, was suffering from swelling of the right knee when he first came as an out-patient in February of this year. He was a pale, clear-skinned child, with light hair and blue eyes. His mother stated that he was a fat and apparently healthy child till he began to walk at the age of eighteen months. The falls which he then had produced very large ecchymoses, and on several occasions lumps formed upon the buttocks about the size of a hen's egg, which disappeared in a few days in a bruise. When two years old he fell on his right elbow, which became swollen and discoloured. He was taken to the Evelina Hospital and treated with a splint; this very quickly got well. When three years old the left elbow became swollen after a fall; this also quickly got well. From this time up to August, 1888, no joint was affected, and his general health was good. He then slipped, but did not actually fall, after which he complained of pain in the right hip. He was taken to a hospital and kept there, on the presumption that the case was one of hip disease, till February of this year. He was discharged wearing a single Thomas' splint. A few weeks later, the right knee became swollen and tender, although the child was still in the splint and resting. At this time he came to the out-patient department. The hip was then freely movable and painless, but there was a semi-fluctuating swelling about the right knee, and some pain on movement. A splint was applied, and the knee strapped. The knee was quite well fourteen days later. In March the left knee became swollen without any history of injury; it was then that inquiries were made into his history, and the case diagnosed as one of hæmophilia. Rest, without a splint, was advised. The joint quickly subsided. Three weeks later the right wrist became affected, and again got well in a week's time. In May the left knee became again affected, and quickly subsided after rest. A month later the left ankle became swollen, and remained so for a few days. The patient was then sent to the seaside, and seemed much benefited; however, when last seen, Aug. 14th, the right ankle had just become affected. Since last summer the joints have become affected without any definite injury, such as a fall. The child bruises very easily, and when pinched at school becomes black and blue all over. He has never suffered from any external hæmorrhage, epistaxis, or hæmaturia. On inquiring into the family history, ample proof of the hæmophilic tendency of the child was obtained, as will be seen by the following table:—

GRANDPARENTS.

Grandfather. Dead; cause unknown.
Grandmother. Died aged 55 of heart disease.
Thirteen children. Males, 9; females, 4; (of these 5 bleeders).

Five brothers died in infancy. Cause unknown.	Thomas, aged 7. Died at Guy's of hæmorrhage.	James, aged 22; bleeder. Cause of death unknown.	Harry. Died aged 26; bleeder. Several times in hospital for bleeding. Cause of death cardiac disease.	Margaret, aged 36. Bruises easily. Alive and unmarried. Bleeder.	Mother of patient, aged 30; not bleeder, but suffered from flooding after two confinements.	Sister; married; six children; no bleeders.	Sister; married; three children; no bleeders.	Brother; unmarried; not a bleeder

Three children (two bleeders).

Patient, aged 5.	Male, aged 18 months. Died from hæmorrhage after circumcision.	Male, aged 18 months; alive, and so far has shown no evidence of bleeding.

Remarks.—In the above tree it will be noticed that there is the usual prolific tendency of such families, and that there is a preponderance of males over females, as noticed by Mr. E. Lane.[3] But it is rather strange that, in the mother's family, the females were as liable to show the tendency as the males; for, out of nine male children, only three were bleeders, although the death of five other brothers in childhood points to some unusual cause of mortality, whereas, out of four female children, two showed evidence of bleeding. The fact that the patient had been admitted into a hospital as a case of hip disease, and discharged as nearly cured, suggests that some of the cases of joint disease, especially those affecting the hip, diagnosed as tubercular, and which have yielded rapidly to treatment, may be in reality cases

[1] A Treatise on the Hæmorrhagic Diathesis.
[2] Diseases of the Joints, p. 161.
[3] Brit. Med. Jour., vol. i., 1885, p. 840.

of a similar nature. Thus we find the report of a bleeder admitted into the Sunderland Infirmary for synovitis of hip, who subsequently developed a tonsillar abscess, which on being opened caused almost fatal hæmorrhage. On inquiry it was found that the patient came of a hæmorrhagic stock.[4] This probably was a case of hæmorrhagic effusion into the hip, as we learn that it quickly got well.

CASE 2. *Supernumerary auricle on neck.*—F. T——, a healthy boy, aged six months, was first seen on June 25th. On the left side of the neck, over the middle of the anterior border of the sterno-mastoid, was a nipple-like projection about half an inch in length; a rod of cartilage was prolonged into it from a thin plate which was freely movable in the subcutaneous tissue. This plate felt somewhat the shape of an auricle, being concave in front and terminating above and anteriorly in a sharp point. The projection had increased in size since birth. After a drawing had been made, the projection was removed by an elliptical incision. A process existed, dipping down deeply apparently beneath the sterno-mastoid, to which it was attached. The wound unfortunately suppurated, but healed quickly after a counter-opening had been made in the front of the neck. The condition found on dissecting the projection is shown in the accompanying drawing. The

nipple-like nodule of skin contained a delicate rod of fibro-cartilage, which is attached below to a curved bar of bone, and this again terminates in a plate-like expansion, also of osseous material. The bar lay in the subcutaneous tissue, while the plate was deeply situated and was firmly attached to a muscle, probably the sterno-mastoid. A resemblance may easily be fancied between this structure and the pinna, the bar representing the anti-helix terminating below in the antitragus and the plate-like expansion the lobule. But unfortunately the deep situation and the osseous structure of these parts of the excised mass are at variance with the notion. The terminal rod of fibro-cartilage is the only part which could be considered the homologue of an auricle, while all that can be said of the deeper part is that it is a bar of bone probably formed in a branchial arch. To carry analogy further it may be compared to a hyoid or even a mandibular arch.

ROYAL INFIRMARY, NEWCASTLE-ON-TYNE.

A CASE OF ATROPINE POISONING; REMARKS.

(Under the care of Dr. OLIVER.)

POISONING by atropine is not of frequent occurrence, and the following case is an important contribution to the literature on the subject. A dose of two grains of atropine has proved fatal in the adult.[1] Dr. Oliver's patient appears to have taken nearly twice that amount, and the symptoms produced by the drug were severe. Drs. Ott and Colman[2] found the increase of body temperature produced by atropine to be independent of the blood pressure, and believe its influence to be a stimulation of the thermogenetic centres in the spinal cord, considering that the rise of temperature is paralleled by that which occurs in tetanus. This case also adds one to the fairly large group in which the subcutaneous administration of morphia has apparently done good, a result contrary to the finding of the Edinburgh Committee, that "meconate of morphia does not act antidotally after a large dose of atropia; thus, whilst atropia is an antidote to morphia, morphia is not an antidote to atropia." For the following account we are indebted to Mr. T. W. Gibbard, house-physician.

M. A. D——, aged twenty-one years, was admitted into the Royal Infirmary, Newcastle-on-Tyne, on Aug. 4th, 1889, with symptoms of belladonna poisoning, having taken nearly one ounce of "eye-drops" (four grains of sulphate of atropine to the ounce) twelve hours previously, whilst drunk. Salt and water had been given by her friends, which had failed to produce vomiting. On admission, at 12.15 P.M., the patient's condition was as follows:—The face was flushed, the lips dry and blistered, tongue and mucous membrane of mouth dry. The eyes were somewhat prominent, the conjunctivæ injected, the pupils widely dilated and they did not react to light. There were twitchings of the fingers and toes, with marked tremor. She did not answer to her name, and refused to take milk. She was delirious, constantly moving in bed, picking the bedclothes, muttering, and pointing to imaginary objects. The movements were irregular and the skin dry. Temperature 101° F., pulse 135, respiration 32 (irregular). No vomiting. There was retention of urine, and the plantar and patellar reflexes were increased. She was ordered one ounce of castor-oil with eight minims of tincture of opium. At 3.30 P.M. the patient was still delirious and very excited; she did not appreciate questions and kept talking incoherently. There was no rash. Nearly forty ounces of urine, sp. gr. 1015, medium amber colour and free from albumen, were removed with difficulty by catheter, patient offering great resistance. She was given three minims of the hypodermic solution of morphia. At 6 P.M. she was not nearly so noisy. Free perspiration; temperature 100·4°. At 8 P.M. she was given another hypodermic injection of morphia, followed by four hours' sleep.

Aug. 5th.—Patient seems much better, talks quite sensibly, knows her name, and appreciates everything that is said to her; has taken milk. Her pupils are still dilated, tongue dry, and she complains of thirst. The skin is hot, temperature 103°, pulse 128. Chest resonant on percussion and no abnormal sounds on auscultation over lungs. Heart sounds healthy. Has passed urine. Bowels have not acted. During the day she was very drowsy. Evening temperature 102°.

6th.—Morning temperature 100·4°, evening 101°. Still drowsy.

7th.—Morning temperature 100°, evening 99·8°; an enema was ordered, the bowels not having been opened since admission. The next day her temperature was normal and continued so, but she was still constipated, requiring a calomel and jalap powder on the 10th.

A week after admission the pupils were still dilated, though her sight was good. She was discharged well on the 16th.

Remarks by Mr. GIBBARD.—I think the points of interest in this case are the following:—1. The high temperature for the first three days. This, in the absence of any inflammatory cause, confirms the opinion of most therapeutists as to the pyrogenic influence of atropine—*vide* Mitchell Bruce, who, however, regards the rise of temperature as correlated with the increased nutritive activity caused by quickened circulation and respiration. The heightened pulse and quickened respiration, noticeable before the rise of temperature, suggest that a large dose of poison was taken, a moderate dose being supposed to slow the pulse. 2. The constipation, which continued for a week after taking the poison, the patient requiring an enema on the 7th and calomel on the 10th, this being contrary to the general idea that belladonna has a tendency to cause increased peristalsis of the bowel, and is probably explained by

[4] Ibid., 1884, vol. ii., p. 714.

[1] Taylor's Medical Jurisprudence, p. 433.
[2] Wood's Therapeutics, p. 215.

the peculiar effect of atropine upon the secretion of mucous surfaces. 3. The good effect of morphia in this case, the skin becoming moist, and the delirium entirely disappearing after the second injection.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

TWO CASES OF LITHOLAPAXY IN CHILDREN.

(Under the care of Mr. F. E. MANBY.)

WE presented our readers a fortnight ago[1] with the records of four cases of removal of stone from the bladder in male children, two by means of litholapaxy and two by means of supra-pubic cystotomy. In the former the stones were of small size, weighing ten and thirty grains respectively, and in the latter 215 and 562 grains. The following cases are equally good examples of the successful crushing and removal of small stones, and resemble them in many particulars. It is advisable that the surgeon be provided with a second lithotrite, as one may get out of order or break. For the following notes we are indebted to Mr. J. Harley Gough, late house-surgeon.

CASE 1.—Ernest P——, aged five, was admitted into the hospital on Feb. 4th, 1889, suffering from symptoms of stone in the bladder. The boy was sounded and a small calculus detected. On March 8th litholapaxy was performed under chloroform, a No. 5 lithotrite being used to crush the stone, and the débris evacuated with a Thompson's bladder aspirator and No. 6 cannula. The patient soon recovered from the effects of the anæsthetic, and towards evening was playing in bed apparently quite well. He passed urine freely, and only complained at first of a slight scalding sensation in the urethra. There was some little sandy deposit in the urine for the first two days. On March 17th he was sounded under chloroform very carefully, but nothing abnormal was detected in the bladder. He was discharged cured on March 24th. The stone was composed of uric acid, and the dried fragments weighed nine grains.

CASE 2.—Frank R——, aged nine, was admitted on July 29th, 1889, with very severe symptoms of vesical calculus, and when sounded a moderate-sized calculus was detected. On July 25th the stone was crushed under chloroform with a No. 5 lithotrite, and the fragments evacuated as in the preceding case. The operation lasted about forty minutes. The patient soon rallied from the effects of the operation, and expressed himself much relieved, all his urinary troubles having disappeared. On July 28th he was sounded under chloroform again, and with negative results. The boy was discharged cured the next day. The calculus was a uric acid one, with an external layer of phosphates; the dried fragments weighed thirty-six grains. These boys were seen recently, and the parents of each say they have been quite well, and have had no bad symptoms since they left the hospital.

[1] THE LANCET, Mirror of Hospital Practice, vol. ii., p. 903.

Medical Societies.

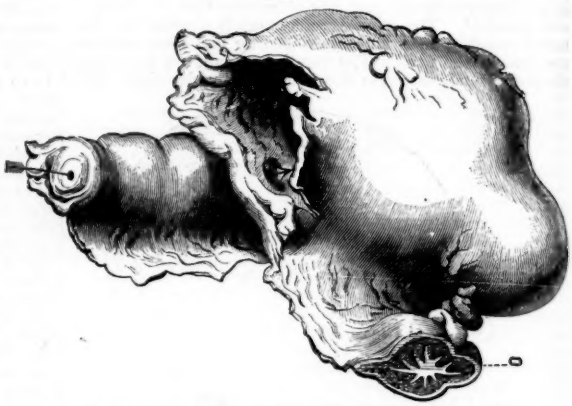
ROYAL MEDICAL & CHIRURGICAL SOCIETY

Ruptured Tubal Pregnancy.

AN ordinary meeting of this Society was held on Nov. 12th, the chair being occupied by the President, Sir Edward Sieveking.

Mr. BLAND SUTTON communicated a paper on a case of Ruptured Tubal Pregnancy, and added some remarks on the cause of early rupture. The patient was a woman aged thirty-seven, who, though married for seventeen years, had never before been pregnant. There was no history of gonorrhœa. The catamenia had been regular till three months before admission, when she missed two periods. Five weeks before admission the patient was attacked with collapse, from which she slowly recovered; a few days later a swelling was noticed in the right side of the abdomen. On admission into the Middlesex Hospital a swelling was found in the right iliac fossa, which extended upwards to the costal arch and inwards to the mid-line. A sound introduced into the uterus passed to the extent of three inches. In Douglas's fossa on the right side a swelling was felt behind the uterus; there was tenderness over the abdominal aspect of this swelling. The temperature for the twelve succeeding days varied between 99° and 101° F. Laparotomy was performed, and putrid blood clot was found in the pelvis extending up to the liver. Smart bleeding from the right broad ligament occurred, which was checked by transfixion of the ligament close to the uterus. The tube and ovary were removed, the abdomen washed out with warm water, and a glass drainage tube inserted for three days. The patient did well. The ovary contained a true corpus luteum of pregnancy, and a rounded mass removed contained an apoplectic ovum in which was a fœtus of the seventh or eighth week. The varieties of apoplectic ovum were then discussed, and it was suggested that if an ovum of the size of a walnut became suddenly enlarged by hæmorrhage to that of an orange the result would be expulsion if it lay in the uterus, but rupture with hæmorrhage if it lay in the tube. The author urged finally that early rupture was to be attributed to the formation of an apoplectic ovum suddenly distending the tube, and held that no intra-peritoneal hæmatocele should be attributed to ruptured tubal pregnancy unless membranes, a fœtus, or both were forthcoming, however suggestive the clinical evidence might be. (Figs. 1, 2, 3.) It would also be valuable to obtain an

FIG. 1.



The distended Fallopian tube, showing the situation of the rupture. *o*, Ovary with corpus luteum.

FIG. 2.

Apoplectic ovum from the Fallopian tube, represented in Fig. 1.

FIG. 3.

Distorted head of the fœtus. About seventh or eighth week of gestation.

expression of opinion as to the significance of the presence or absence of breast signs in tubal pregnancy.

Mr. SUTTON also communicated details of another case. A woman aged twenty-five was admitted into the Middlesex Hospital, under Dr. William Duncan's care, with pelvic pain and painful menorrhagia. Vaginal examination revealed a tumour on the left side of the uterus as large as a Tangerine orange. In September, 1886, a few weeks after her admission, abdominal section was performed by Mr. Sutton, and a hæmatocele, encysted in a portion of the great omentum, was removed with tube and ovary. The hæmatocele was supposed to be due to rupture of an ovarian follicle, of which many large ones existed in each ovary. A more critical examination of the specimen showed that it was a ruptured tubal pregnancy. The rupture occurred about an inch from the abdominal ostium of the tube, and an apoplectic ovum lay snugly nested in the omental fold, surrounded by blood clot. The ovum equalled a chestnut in size and would correspond to about the fourth or fifth week. How long the hæmatocele had existed it would be very difficult to state, as it was impossible from the history to fix the date of rupture. The patient made a rapid and excellent recovery.

Dr. PRIESTLEY desired to dwell on one or two practical points which might serve as guides with reference to the question of operation. Some cases of ruptured tubal pregnancy had occurred which were not due to an apoplectic ovum. He remembered one patient whose gestation continued for between three and four months, and then the tube ruptured. No trace of apoplectic ovum existed, but there was quite a distinct placenta and cord. He had seen other cases also in which the ovum was not embedded in clot, but the tube had been unable to bear the strain, and this had given way. He thought that Mr. Sutton had exercised a wise discretion in removing the tumour when he did. It was necessary to remember that there was the greatest possible difficulty in diagnosing between hæmatocele and intra-peritoneal rupture. In pure hæmatocele the patient usually got well, but if the case were interfered with by operation it was liable to go wrong, either from the direct results of the operation or from subsequent hæmorrhage. Such cases should be interfered with only when suppuration took place. But when a pregnancy occurred and the tube burst, it was best to remove the ovum and the tube at the same time. The dangers of leaving an ovum extravasated into the peritoneal cavity were by no means slight, and operation early performed might save the patient from many misadventures. The initial collapse might arrest the hæmorrhage, the patient might rally, and the ovum remain in the pelvis; it then might grow, and the patient be liable sooner or later to fresh dangers, which had to be met by a more serious operation. The difficulty of diagnosis was very great; some of the symptoms might be absent—as, for instance, the breast symptoms were in Mr. Sutton's case; indeed, there might be no other signs but the missing of the period. In cases of doubt he would be disposed to give the patient the benefit of that doubt and leave the case alone. He referred to the case of a lady who was seized suddenly with the symptoms of hæmatocele, and nearly died of collapse. Operation was postponed for a few hours, but in the morning the patient was so much better that it was not done. Later an abdominal pregnancy developed, and laparotomy had to be performed.

Dr. MATTHEWS DUNCAN said that the successes of Mr. Lawson Tait and others had led to an extension of laparotomy in cases of this kind that he could not follow or adopt. It appeared to him quite impossible at present to lay down conditions as to when operations should be resorted to and when it should be avoided. These enthusiasts for operation taught that there was no such thing as a hæmatocele except those produced by ruptured tubal pregnancy; whereas it was known that hæmatocele was common even in virgins. Mr. Sutton rightly said that a case could not be considered one of ruptured tubal pregnancy unless ovuline structures were found. If it were admitted that all these cases were pregnancies, and that all were otherwise unavoidably fatal, it of course followed that it was necessary to operate on all of them. But that a tubal pregnancy might rupture without a fatal result was certain. His own impression was that those which were let alone did quite as well as those which were operated on. During the last twelve months he had seen quite a dozen cases in which the clinical signs of tubal pregnancy were strongly marked in some of these he had urged operation, but they had all got well. Referring to the case to which Dr. Priestley had alluded, he was called to the patient, who was supposed to be pregnant, and found her collapsed from rupture of the tube. She was pulseless, cold, white as marble, and supposed to be dying. It seemed impossible to interfere surgically, as she was in such a critical condition. But she rallied in a remarkable way, and eight months afterwards she was operated on, and a dead fœtus extracted from the abdomen. Many such cases were known in which a woman recovered from the rupture of the tube while pregnancy still went on. He repeated that the presence of hæmatocele was no evidence of tubal pregnancy. He did not understand Mr. Sutton to mean that an apoplectic ovum was a frequent cause of ruptured tubal pregnancy, but that in the two cases he had related it was the precipitating cause of the rupture.

Dr. HERMAN asked what was an apoplectic ovum? If Mr. Sutton meant by that a slight hæmorrhage into the chorion, he was prepared to agree with him. One could not expect to find a partly organised "carneous mole," such as those coming from the uterus. In these cases, first there occurred one or two slight hæmorrhages, and then followed a much larger one, which caused the rupture. Dr. Janaway of New York was responsible for this theory, and pointed out in support of it that blood of different dates was often found in these cases. The amnion had been found lying quite loosely in the tube, and showing no signs of distension with blood. He thought that the symptoms complained of in tubal pregnancies (the severe paroxysmal pain &c.) were also to be explained by an apoplectic condition of the ovum; the cause of these pains being slight hæmorrhage into the chorion, distending the tube.

Dr. GRIFFITH wished to point out that Mr. Sutton opened the abdomen seven weeks after rupture of the tube. To establish his theory it would be necessary to prove that the hæmorrhage was of the same amount immediately after the rupture. He would arrange the sequence of events in a different order; the apoplectic ovum he thought first died, then the hæmorrhage followed; he considered that it still remained to be proved that the hæmorrhage was the cause.

Dr. ROBERT LEE asked for an anatomical definition of an apoplectic ovum. Was it a hæmorrhage into the sac of the amnion, or where did it take place? The bleeding, he thought, in most cases came from the ruptured tube. A specimen of this kind in the College of Physicians Museum showed no hæmorrhage into the amnion. Could it be called an apoplexy of the chorion? He believed it was a hæmorrhage external to the decidua, and that the membranes within lay clear of blood. In that case "apoplectic ovum" was not a scientific term, the hæmorrhage coming from the sinuses of the decidua. He thought that the action of the chorionic villi produced a gradual atrophy of the surface of the tube, and that this explained the occurrence of rupture. The best method of treatment was to cut down at once, but one must be guided by the individual symptoms.

Dr. HEYWOOD SMITH said that the desirable thing was to formulate guiding rules for treatment. Cases of undoubted rupture of the tube occurred, and yet the patient survived. He related a case in which the diagnosis was confirmed by the escape of a decidua from the uterus, and yet the patient recovered without operation. Granted that a patient might recover from rupture of the tube, there was still the possibility of the fœtus living and producing graver complications. He therefore advocated operation either at once or soon after rallying had taken place.

Dr. CULLINGWORTH was glad that Mr. Sutton had raised his voice against the tabulation of those cases as gestation where no ovum had been found. Intra-peritoneal hæmatocele might occur from numberless causes besides ruptured tubal gestation. During the last few months he had observed clinically a large number of hæmatoceles, and in the last two cases he had examined he detected by palpation a large tube. He advised abdominal section, and a considerable amount of soft, dark clot was found encysted in the peritoneum, but the source of the hæmorrhage was not a ruptured tube; for in one it was an ordinary hæmatosalpinx, and in the other a ruptured varicose vein. The proper treatment of hæmatocele in the greater number of cases was not to interefere, but where one could diagnose a large tube, and the cause of the hæmorrhage still remained, it was one's duty to advise abdominal section and to remove the cause. If he could diagnose tubal gestation and he felt that the diagnosis was fairly well

founded, even if there were no signs of rupture, he would advocate laparotomy and make the diagnosis certain. The majority, if left to themselves, ruptured, and ended fatally; it was, therefore, advisable to open the abdomen and remove the enlarged tube, together with the gestation. And if this was advisable before rupture, it became all the more so after this had occurred.

Dr. WALTER of Manchester read a short abstract of a case which he ventured to think corroborated the theory of apoplectic ovum being the cause of ruptured tubal pregnancy. The patient was a woman aged thirty-two, a weaver, who had been married eleven years, and who had two children and five miscarriages. Three weeks before admission she had been seized with sudden pelvic pain and faintness whilst at work. She considered herself to be two months pregnant, and had milk in the breasts and morning sickness. The case was looked on as one of ruptured tubal pregnancy. The patient rallied well, and was able to go about, but on several occasions had a good deal of pelvic pain, and for a week before admission was confined to bed. On admission the whole pelvic cavity was found occupied with an elastic tumour in close contact with the uterus. Dilatation of the cervix and examination of the interior of the uterus gave a negative result. Laparotomy revealed a dark-coloured elastic tumour reaching nearly to the umbilicus; the parts were much matted together. The swelling was tapped, and over a pint and a half of chocolate-coloured fluid escaped. A clot as large as a closed fist was found in the floor of this cyst. The patient ultimately recovered, after the supervention of an attack of pelvic inflammation. Examination by Mr. Sutton of the clot removed resulted as follows: The concave aspect of the clot was lined with chorion; a small fleshy mass was found within the clot shaped like a fœtus of the sixth week, and on teasing this the remains of the intestine and a piece of viscus resembling liver was exposed; it was evidently an apoplectic ovum.

Mr. SUTTON, in reply, said that Dr. Priestley had given it as his opinion that not all the cases of rupture were due to apoplectic ovum. The mere immersion of the fœtus in blood would not produce an apoplectic ovum, for the effusion occurred into the decidua itself, and took place before the placental circulation was thoroughly well established. It was not necessary to find hæmorrhage into the amnion in order to establish a diagnosis of apoplectic ovum. The conditions were comparable with those of cerebral hæmorrhage; in the latter the effusion might be either so profuse as to rupture into the ventricles or it might simply lacerate and tear up the brain substance without involving the ventricular cavities. The ovum from the uterus usually possessed a central cavity containing perhaps a fœtus or a cord, but the ovum from the tube generally showed a compressed amniotic cavity, being squeezed up by the pressure of the exuded blood. He believed that the hæmorrhage usually took place into the decidual membranes before the ovum left the tube. He could not discuss the points raised by Dr. Griffith until he had examined more specimens, and it remained for Dr. Griffith to prove his own peculiar views with reference to the sequence of events in the case of a "carneous mole" in the uterus, which were quite at variance with those usually received. He was pleased to find so many speakers agreed that cases of intra-peritoneal hæmorrhage should not be classed as instances of ruptured tubal gestation unless some evidence of fœtus or membranes were forthcoming. He considered it unjustifiable to say in these negative cases that the fœtus had been dissolved, but cases in which embryoes were not found should be put in a class by themselves until a true cause for them could be found.

CLINICAL SOCIETY OF LONDON.

Myeloid Sarcoma of Humerus.—Round-celled Sarcoma of Testicle.—Myositis and Neuritis.—Actinomycosis.—Myxœdema.—Rheumatoid Arthritis.—Pott's Fracture followed by Tetanus.—Dislocation of Forearm.—Paroxysmal Methæmoglobinuria.

AN ordinary meeting of the Clinical Society was held on Nov. 8th, the President, Mr. Christopher Heath, being in the chair. Living specimens were first shown.

Mr. MACNAMARA showed a patient in whom the head and neck of the humerus had been excised for Myeloid Sarcoma, and there had been as yet no recurrence of the disease.

Mr. MACNAMARA also introduced a man one of whose testicles he had removed for a rapidly growing Round-celled Sarcoma. Two years had elapsed since the operation, and the patient remained free from the disease.

Dr. HANDFORD showed a man, aged forty-eight, the subject of Unilateral Myositis and Neuritis. Four months and a half ago the right arm began to fail in strength and œdema and swelling supervened. The biceps, deltoid, and pectoralis major had a "wooden" feel, and considerable atrophy had followed. The points about the case were its unilateral distribution and the association of the muscular affection with the neuritis. Was the myositis primary, and had it by pressure on the nerves produced neuritis, or was the neuritis the primary lesion and the muscular condition induced thereby?

Dr. KELLER showed a case of Actinomycosis in a clerk. Three months before coming under observation the patient developed a swelling at the side of the jaw which was attributed to a carious tooth, though the latter had given no pain. It was extracted, but the swelling persisted. Then incisions were made into it both from without and within, but the tumour had remained. The pus which was discharged was characteristic, being viscid, mixed with blood, and containing grains of the "ray-fungus" of actinomycosis. He had made inquiries about the diet, but could find nothing to suggest the origin of the disease. The patient had had nothing to do with cattle. He diagnosed the disease because there was a fistula which opened and closed without local cause, such as necrosis &c., and there was no history of specific disease. In another case there was a considerable amount of induration around the incision. He proposed to lay the abscess freely open, scrape it, and apply iodoform locally.

Dr. ABERCROMBIE brought forward a case of Myxœdema in a young subject. A girl aged fifteen had developed symptoms between the ages of eight and nine. It came on after an illness which was said to be Bright's disease, and, from being a bright child, she had become apathetic, the skin had grown coarse, and the features altered. The girl suffered a great deal from cold. She had been late in teething and walking, but otherwise had been a normal child. Her growth was stunted, the features typical of myxœdema, and the hands spade-like.

Mr. G. H. MAKINS exhibited a case of Rheumatoid Arthritis in a child. When between three and four it had fits, and then became unable to walk. All its joints except the shoulders had become affected, and the child was bedridden. There was double hallux valgus, though the child had not worn boots. The skin of the forearms was glossy.

Mr. W. RIVINGTON then read notes of a case of Pott's Fracture, with Fracture and Displacement of the Astragalus, followed by symptoms of Tetanus, which subsided after removal of the displaced fragment. The patient, a labourer, aged twenty-seven, fell a distance of fourteen feet from a scaffolding, and sustained the above-mentioned injuries to the left leg and foot, on Oct. 26th, 1887. He was admitted into the London Hospital. There was a good deal of swelling, and the limb was placed on a splint. Inflammation of the soft parts was followed by suppuration and some sloughing over the displaced astragalus. Symptoms of tetanus supervened on Nov. 24th, when Mr. Rivington explored the part and removed the displaced astragalus (which was broken across the body just below the lateral facets) by means of his forceps. The symptoms subsided in a day or two, and the patient recovered with a useful foot. Cases of dislocated astragalus in which tetanus supervened and subsided after amputation, referred to by Bryant and Holmes, were cited, and the possible causes of tetanus—viz., nerve irritation, nerve inflammation, nerve tension, muscle tension, and blood poisoning—briefly discussed. The author considered that, if practised early, excision was preferable to amputation, but that where the tetanic symptoms were fully established probably amputation might be regarded by some as the safer procedure.—Mr. HEATH asked what was Mr. Rivington's experience in removing immediately the broken portions of astragalus. Was his success so great as to warrant immediate interference in cases of this kind?—Mr. RIVINGTON replied that he had operated four times for this lesion, once primarily and three times secondarily; in one of the latter the skin was on the point of sloughing. If he had another such

case, he would certainly advise immediate removal of the fragment.—The PRESIDENT added that in his experience these amputations for tetanus were almost invariably fatal.

Mr. W. G. SPENCER then detailed a case of simple recent Dislocation backwards at the Elbow of both Bones, irreducible from the lower end of the humerus, being held like a button by a rent in the anterior capsular ligament. A boy ten years of age was knocked down by a carriage, and a dislocation of both bones backwards at the elbow was found. Reduction with and without chloroform was tried, with negative results. After a week, reduction under chloroform again failing, the boy was admitted into Westminster Hospital, and a further attempt, both by Astley Cooper's and Lister's methods, made, but without avail. After two weeks' rest in bed the arm remained semi-extended without active or passive movement. Three weeks after the injury a posterior vertical incision was made into the joint, and the olecranon with the whole of the great sigmoid notch of the ulna was removed. A tight band was then found stretching across the back of the humerus at the level of the olecranon fossa. This band was found to become tighter when any attempt at flexion was made, or when the hand and forearm were pulled upon in the long axis of the limb. The forearm was pushed upwards sufficiently to slacken the band, which was then pushed over the end of the humerus. The lower end of the humerus became quite free, and the rent in the anterior ligament could be felt. After the wound had healed and the boy had become an out-patient, passive movement was not well kept up. Still he had recovered with a good arm, and was shown at the meeting. He could flex it to a right angle and extend it to about 150°. Complete extension was apparently obstructed by the lower end of the humerus, which was not taken away. The manner in which the backward dislocations took place was then referred to, also their production on the dead subject. Only one case could be found in which a *simple recent* dislocation had been examined. In this case, under Professor Michaux of Louvain, the arm was amputated for gangrene a week after the injury, during which time several forcible attempts at reduction had been made. The lower end of the humerus had torn the anterior ligament and the brachialis anticus. The tendon of the biceps and part of the brachialis anticus were behind the external condyle. (Both the median nerve and the brachial artery had been ruptured. The radial pulse had been felt after the accident and before the manipulations, after which it disappeared.) Therefore, in this case, both Cooper's and Lister's method of reduction tightened the rent in which the lower end of the humerus was grasped, and any great force would have certainly torn off the lower epiphysis of the humerus. No subcutaneous tenotomy could have got at the band. Active treatment was indicated, since it was impossible to bring the arm to a right angle, as had been done in other cases of irreducible dislocation.—Mr. HEATH remarked that injuries about the elbow-joint gave the surgeon a good deal of trouble. Under the methods of modern aseptic surgery much light might be thrown on these obscure cases by exploration. The subject of excision of the elbow in young subjects opened a wide field for discussion. He would like to know what were the prospects in store for them as to the growth of the limb, and its ultimate usefulness.—Mr. RIVINGTON said he had seen two or three cases in children, but he had been unable to trace them after the operation.—Mr. SPENCER, in reply, said he had seen one case in a child of ten in which much shortening followed, and another in a girl of fifteen. The latter was employed as a lacemaker, and with the aid of an instrumental appliance attached to the elbow was enabled to use the hand for even the most delicate movements.

A case of Paroxysmal Methæmoglobinuria, which had been under the care of Dr. Ringer was then related by Mr. BARTON. The patient, a man aged thirty-nine, came to University College Hospital complaining of passing bloody urine at intervals with shivering. He had had ague in India, and primary and secondary syphilis; he had also been in a lunatic asylum. His first attack came on in India. He caught cold while out walking, and suddenly began to shiver, his face and hands becoming blue and cold. He experienced numbness in the feet and legs, gradually extending upwards to the trunk, and followed by shooting pains in the region of the kidneys. This was followed by the passage without pain of some dark urine. He then went home to bed, and after sweating, and a few hours' sleep, woke, feeling quite well. All his organs were healthy except for slightly enlarged liver. There was nothing in the family history bearing on his disease. The attacks usually lasted about six hours, and he felt quite well in the intervals. In those which occurred whilst under observation it was noticed that on one occasion albumen was present before the colouring matter could be detected; that the greater the depth of colour the less the quantity of urine passed, the quantity gradually becoming normal as the colour disappeared; and that the urine after the attacks was very light in colour and of low specific gravity. In the urine passed during an attack no corpuscles, oxalates, or crystals were found. A specimen was sent to Dr. McMunn for spectroscopic examination, who claimed that *all* its colour was due to methæmoglobin, and stated that all the cases of paroxysmal hæmoglobinuria whose urine he had examined gave the same result. The blood of a finger round which a ligature had been tied, and the finger immersed in ice-and-water for ten minutes, showed little tendency on the part of the corpuscles to form rouleaux. The corpuscles were irregular in shape, and had a tendency to adhere to one another at their edges. The white corpuscles were often smaller than the red, and the effect of a meal on the relative number of white to red corpuscles showed no deviation from the normal. With other methods of treatment chlorate of potash was given in gradually increasing doses, the time of administration being strictly from 9.30 A.M. to 12 midday, until in that time he took half an ounce. On another occasion two four-grain doses of nitrite of sodium were given with half an hour's interval, but in neither case was the urine, or blood, or the patient obviously affected. Nitro-glycerine tablets of 100th of a grain were tried, and on one occasion the patient took twenty-eight, or more than a quarter of a grain in two and a half hours, without obvious effect on the urine or blood. The treatment was unsatisfactory. The arsenic, however, seemed to produce longer intervals between the attacks; but this may have been due to the approach of summer, when his attacks became always less frequent.—Dr. BARLOW said that the observation of the passing of a large quantity of albumen before the pigment was interesting. In order to elucidate these cases it was necessary to note carefully the co-existences. The association with syphilis was noteworthy, though that of itself could not be the cause. Other cases had been associated with ague. Syphilis, like ague, seemed to lessen the power of resistance of the vessels, and so render their equilibrium more easily disturbed. The similarity to Raynaud's disease was to be noted, for the patients also had attacks of paroxysmal hæmoglobinuria, and they sometimes passed into a sleepy state. He asked if blood-jaundice had been noticed on the day after an attack; in some cases a certain amount of yellow staining had been seen.—Dr. ARCHIBALD GARROD inquired if the blood-serum was stained in this case. Some of these patients had intermittent albuminuria at times when hæmoglobin was absent. It had also been pointed out that some cases of acute nephritis were preceded by hæmoglobinuria.—Dr. COUPLAND alluded to the work of the late Dr. Mahomed on this subject. He had pointed out that in scarlet fever blood-colouring matter escaped by the urine before evidence of nephritis existed. This suggested the presence of a poison, acting not only on the walls of the vessels, but also on the blood itself.—Sir DYCE DUCKWORTH said it would be interesting to know the after-history of the cases which had been reported up to the present time.—Mr. BARTON, in reply, said that the conjunctivæ had a lemon colour. No hæmoglobin was found in the serum of a blister experimentally raised, and the temperature had not been high.

MEDICAL SOCIETY OF LONDON

Cerebral Abscess.—Pneumothorax.

AN ordinary meeting of this Society was held on Nov. 11th, Dr. C. Theodore Williams, President, in the chair.

Mr. MARMADUKE SHEILD read a short paper on a case of Cerebral Abscess due to Ear Disease evacuated by Trephining. The patient was a Scotch gentleman aged thirty, of active, intellectual habits. The leading symptoms were long-standing otorrhœa, pain in the head, rigors, and occasional vomiting, but no optic neuritis. All these symptoms

disappeared, and he improved so much under treatment that he was about to return home, when more grave complications suddenly arose. There were Cheyne-Stokes' respiration and sluggish cerebration, especially denoted by slow stammering speech. Trephining was performed, and an abscess found in the temporo-sphenoidal lobe, containing greenish, offensive pus. The operation quite failed to relieve the symptoms, and death occurred in about forty-eight hours. The leading points of the necropsy disclosed extensive caries of the temporal bone, and an opening in the anterior aspect of the *pars petrosa*. The abscess was not of recent date, being lined by a distinct membrane, and it had opened by a small aperture into the ventricles. The latter cavities were full of pus, and recent basal meningitis extended from the pons to the Sylvian fissure on the right side. It seemed clear that the operation had been performed just too late. The clinical fact of these abscesses existing without declared symptoms was emphasised, and arguments were advanced advocating the employment of a small trephine aperture for purposes of exploration, whereby exploratory punctures into the cerebral substance might be more early and safely performed.—Dr. H. SAINSBURY related the case of a boy aged seven, who was admitted into the Royal Free Hospital suffering from pain in the right side of the head, with fever, vomiting, and diarrhœa; there was a discharge from the right ear, and his health had been gradually failing for three weeks before admission. The optic papilla was found to be swollen, and afterwards well-developed optic neuritis supervened. Then followed drowsiness and convulsions, slight conjugate deviation of the eyes to the left being noticed. The case was trephined, but puncture over the cerebellum failed to find pus. Post mortem a large abscess was found in the antero-lateral part of the cerebellum, pressing on the veins of Galen and thus producing considerable effusion into the ventricles.—Mr. BATTLE, the operator in the case described by Dr. Sainsbury, said that at the first exploratory puncture made into the cerebellum the patient turned faint, and he was therefore unable to proceed with the operation. Slight relief followed the escape of some of the cerebro-spinal fluid from the ventricle, but it was not maintained, and the patient died comatose. Dr. McEwen had published a case somewhat similar to that detailed by Mr. Sheild, an old abscess being found in the centre of a more recent one.—Dr. DE HAVILLAND HALL dwelt on the importance of these cases from an insurance point of view. He thought those were wise who would reject altogether cases having a discharge from the ear.—The PRESIDENT had made it an invariable practice to refuse these cases when applying for insurance, for a great many people with a slight discharge from the ear paid absolutely no attention to it, and carelessness might produce serious complications at any time.—Mr. SHEILD, in reply, said the case related by Dr. Sainsbury and Mr. Battle showed the difficulty sometimes experienced by surgeons in finding an abscess even when the cranium was opened. Children bore pressure on the brain remarkably well, and therefore, if signs of pressure in them were developed, it usually indicated a large lesion. Many patients might have disease of the middle ear without discharge; it was therefore well to seek for odour (the smell of a suppurative otitis being characteristic), and to examine with a mirror and speculum. In a patient with chronic ear disease three things were likely to set up acute inflammation—salt water, blows on the head (especially boxing the ears), and the performance of some slight operation; in the latter case the germs always present appeared to gain admission through the open vessels laid bare by the operative procedure.

Dr. EWART then read an exhaustive communication on Pneumothorax and the value of its Treatment by Aspiration, with observations on the composition and pressure of the gaseous contents of the pleura. He ranged his subject under five heads: (1) the narration of clinical cases; (2) ante-mortem and post-mortem observations on the intra-pleural pressure in pneumothorax; (3) the causes and effects of intra-pleural pressure; (4) the chemical composition of the gases of pneumothorax; and (5) the question of the advisability of tapping. He related the clinical history of three cases. The first was one of alcoholic neuritis; left empyema was diagnosed, but this was found not to exist, though there was swelling and œdema of the subcutaneous tissue, dulness over the affected area, and modified breath and voice sounds. An aspiratory puncture at the left base gave a negative result, but after the needle was withdrawn sudden orthopnœa developed, and the patient lingered and died on the eighth day afterwards. The second case was one of chronic phthisis; left pneumothorax gradually supervened, with increasing dyspnœa. Aspiration was performed and gave temporary relief, life being prolonged for one day. The third case was one which had been under the care of Dr. Dickinson, and Dr. Ewart made his acquaintance with it on the post-mortem table. It was one of rapid phthisis in a young man, the symptoms of pneumothorax being acute, and death following within a week. Purulent fluid as well as air were found in the pleural sac. Operation was performed by Dr. Powell's trocar, introduced into the sixth interspace. A water manometer connected with it remained at zero, showing that there was no intra-pleural pressure. But after an act of coughing the pressure rose to twelve cubic inches of water, and then afterwards gradually returned to only a quarter of an inch. Then, when aspiration was used, the heart gradually returned to nearly its normal position. At the necropsy the left apex was found adherent, and towards the axillary surface a thin stretched membrane was perforated. The actual cause of the pneumothorax appeared to be a ruptured emphysematous bulla. The opening was extremely minute, and seemed to be gradually becoming closed. Dr. Ewart performed certain post-mortem experiments on the second case. He introduced a trocar into the left fifth intercostal space, connected it with a water manometer, and obtained therewith the following results: When the subject was in a position of dorsal decubitus there was a positive pressure in the pleura of 10½ cubic centimetres of mercury. When the trunk was raised to a semi-reclining position the pressure rose to 16½ cubic centimetres; placed horizontally again, it fell to 11 cubic centimetres. The cæcum and sigmoid flexure were then laid open to let out the gas from the colon; this reduced the intra-pleural pressure to 8½ cubic centimetres. The abdominal cavity was next laid open by a free vertical and transverse incision, which brought down the pressure to 6½ cubic centimetres. On removing the abdominal organs and dividing the inferior vena cava, there still was found a positive pressure of 3·3 cubic centimetres. The diaphragm on the affected side bulged 11 centimetres below the xiphoid cartilage, though the central tendon remained horizontal. On opening the pericardium through the central tendon the heart was found entirely to the right of the mid-sternum. The pressure after letting air into the pericardium remained the same as before. The left auricular appendix was then excised, but the pressure still remained the same. The right pleura was opened; the right half of the diaphragm then descended and the left intra-pleural pressure rose to 4·8 cubic centimetres, and the heart moved more to the left than it had previously done. The smallness of the increase of pressure on the left side as the result of opening the right pleura was accounted for by the diseased condition of the right lung. The right half of the diaphragm was then laid freely open from below, and the left pleuro-pericardium was seen to bulge inwards. The experiments proved that the heart underwent a simple translation of position without suffering rotation. The author summed up the main displacements as follows:—Flaccidity, and in some cases protrusion of the intercostal spaces; unilateral flaccidity or prolapse of the diaphragm, and displacement of the liver, spleen, or stomach downwards, the latter varying according to the side affected. Dr. Ewart then dealt at length with the variations of intra-pleural pressure, the oscillations of which were in many cases identical with the normal. In one of his patients ordinary breathing gave rise to no oscillation of intra-pleural pressure, but when he coughed there was a considerable pressure, this being due chiefly to an increase of the pneumothorax. He then referred to and compared the condition of the diaphragm in inspiration when the patient was suffering from pneumothorax or paralysis respectively. He showed that after the act of coughing the pressure in the pneumothorax would be increased both directly and indirectly. The question of the composition of the gases found was next dealt with. The quantity of nitrogen appeared to remain the same, and there was an even interchange between the oxygen and carbonic acid—the former decreasing, the latter increasing. He thought that the interchange took place chiefly from the pleura rather than from the lung. Some experiments performed by the brother of Sir Humphry Davy were quoted, showing that gases might be absorbed at different rates from the two pleuræ of the same animal.

The collapsed lung containing cyanosed pulmonary blood, he thought, might exhale carbonic acid, and some oxygen might be withdrawn from the pleura by this blood, but the chief part of the oxygen found its way into the active capillaries of the visceral pleura, the latter giving out and taking in extra moisture, and the gas being absorbed by the fluid. With regard, lastly, to treatment, he asked if it were worth while to introduce an aspirator and relieve the tension; he thought this should be done even in phthisis, where there was little prospect of relief. Again, he recommended aspiration to assure diagnosis—to distinguish, for instance, between phthisical and the so-called spontaneous pneumothorax. And then, if a first operation had been performed and the heart had not returned to its place, after a reasonable lapse of time a second aspiration might produce a more favourable result.—Dr. THEODORE WILLIAMS enumerated at least five causes of pneumothorax: the spontaneous variety due to rupture of an emphysematous vesicle, the traumatic, the bursting of a gangrenous abscess into the pleura, the discharge of an empyema by way of a bronchus, and tubercular pneumothorax. In considering operation the question whether the pneumothorax were general or local should be weighed, for if it were localised no operation was needed. He would limit aspiration to tubercular cases and those following empyema. When general pneumothorax occurred in phthisis, it was usually in association with the acute form, in which it was rare to get adhesions early. In some cases there was great pressure, while in others there was none; this depended to a great extent on the shape and multiplicity of the openings. — Dr. HAWKINS asked as to the duration of the third case related. He thought exploration rarely of value.—Dr. EWART, in reply, said the man had probably had pneumothorax a month before the aspiration, and he died twenty-four hours afterwards. In reply to Dr. Black, he said he had not taken the temperature of the air withdrawn. The phthisical patients usually had a high temperature of the hectic type.

HUNTERIAN SOCIETY.

Foreign Bodies in the Air-passages.—Clinical Examination of the Colour of the Urine.

A MEETING of this Society was held on Wednesday, Oct. 23rd, Mr. R. Clement Lucas, B.S., F.R.C.S., President, in the chair.

Mr. T. MARK HOVELL read notes of two cases of Foreign Bodies in the Air-passages. Case 1 was that of a woman aged thirty-three. A piece of bone from a sheep's head, which she had been eating, three-quarters of an inch long, was lodged in the trachea a quarter of an inch below the vocal cords for two months. It was successfully removed through the mouth by means of forceps after the larynx had been sprayed with cocaine. Case 2 was that of a lady with a quarter of a peeled walnut lodged in the right bronchus. It was coughed up at the end of five days.

Mr. F. ROWLAND HUMPHREYS read a paper on "The Clinical Examination of the Colour of the Urine." After praying the indulgence of his audience on the ground of the difficulties in carrying out a thorough investigation on the subject of the paper in a general practice, the author proceeded to give a sketch of the life-history of the urine pigments. They were principally two in number: urobilin, which had not been isolated, and which appeared to be hydrobilirubin absorbed from the contents of the intestines; and urochrome, discovered by Thudichum, excreted to the amount of 0·551 gramme per diem. Both pigments came from the hæmoglobin of the blood. In his investigations, the author had made use of comparison of the colour of the urine with that of a 4 per cent. solution of tinct. iodi, P.B. The method was as follows: the standard amount taken was one drachm (3·4 cubic centimetres); half of this was placed in a large test tube, and water added till it was of exactly the same colour as a sample of the urine (previously cleared by warming or filtering, and if then cloudy diluted with water equal parts), placed in a similar test tube, and compared by means of light reflected through the two liquids from a sheet of white paper held close behind them. The test was done twice, the sum of the diluted solutions being measured in a 100 cubic centimetre measure, and the result recorded either as a fraction whose numerator was 1, and whose denominator was the number of cubic centimetres, or else this fraction multiplied by 1000, and divided out to give a convenient whole number, the total urine for the twenty-four hours being reduced to the normal fifty ounces for men and forty ounces for women. All the pigments in recently passed urine being yellow, such a record would give the total colouring power of the yellow pigment matter of the urine, but would not of course differentiate them. A gas jet surrounded by an opaque white globe formed a good source of light where daylight could not be obtained. In order to apply the method to pathology, it was necessary to first obtain the normal excretion in health and its variations. Each sample of urine passed by a healthy adult on six successive days was investigated as to its pigment, giving, summed shortly up, the following results: the pigment was at its true maximum 3·5 hours after a (nitrogenous) meal, like the excretion of the bile salts, which had the power of causing solution of the red blood-corpuscles. It was increased by nitrogenous food, constipation, and severe brain work. It was diminished during the night, though the first morning urine was highest in colour, and by free action of the bowels. As to disease, a sudden leap from one extremity to the other, in either direction, was after the first sign of recovery. It was increased largely in acute febrile conditions, less so in parenchymatous nephritis; in some forms of anæmia, apparently when the waste of hæmoglobin was in excess of its formation; in hysteria (in two cases great increase in the quantity of urine and of the salts passed) and in gastric catarrh. It was decreased immensely in acute uræmia, less so in renal cirrhosis and in chronic uræmia. A steady fall in the excretion preceded death in one case, apparently when the formation of hæmoglobin was deficient. The paper was illustrated by numerous charts, by some samples of urine showing varying degrees of colour, and by a demonstration of the method of examination which had been employed.—Dr. THUDICHUM expressed his pleasure at this subject having been taken up for practical purposes, as it would be advanced thereby. The author's method would become useful provided that he produced an invariable and reliable standard. The author had correctly said that writers on the subject of the colouring matter of the urine all disagreed. This arose from the fact that most of them had never studied the subject practically, nor even its literature. When such impure extracts as that called "urobilin," containing a substance which gave a feeble spectrum, but which had never been isolated and had never been analysed, were held up as chemically defined bodies, science came to an end. Now he (Dr. Thudichum) had shown that the body which showed that spectrum was not an immediate principle of the urine at all, but one of four decomposition products of the normal urinary colouring matter, urochrome. The entire subject, however, of the alleged chemical relationship of the pigments of the body was in so shadowy a state that he would caution the audience not to connect any practical considerations with them. Clinical or practical medical work of any kind must be placed upon a firm chemical basis in the first instance. The teaching of the text-books regarding the urinary pigment in disease was just as deficient as that regarding the normal pigment.—Dr. PYE SMITH congratulated Mr. Humphreys upon his interesting paper, and remarked on the great amount of labour entailed and the patience required in carrying out his urinary experiments. Work such as Mr. Humphreys' was much needed. Daily variations in many of the constituents of the urine needed as much investigation as the physiological process in other organs. Reflected light as from a sheet of white paper transmitted through the urine was the best for judging of the colour, much better than direct sunlight. Urine in febrile states, although high coloured, did not necessarily contain an increase in the amount of pigment, inasmuch as the urine is usually scanty and the water diminished. Again in hysteria the urine, although pale and of low specific gravity, was abundant and much diluted, and therefore the colouring matter excreted might be normal or in excess. Dr. Pye Smith added that the amount of pigment in the urine is often of value in cases of chronic Bright's disease as a guide to the activity of the kidney in secreting urea. He concluded by again expressing his belief in the practical as well as the scientific value of such observations as they had heard in Mr. Humphreys' interesting paper.—A few remarks were also made by the President and Dr. F. J. Smith, and Mr. Humphreys replied.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of this Association was held at Bethlem Hospital on Wednesday, Nov. 6th, Dr. Hayes Newington, President, in the chair.

A paper was contributed by Drs. Dodds, Strahan, and Greenlees on Assistant Medical Officers in Asylums; their Status in the Specialty. And Dr. Baker showed and described a new form of Urinal, a Fireguard with Spring Lock, an Inspection Plate for Asylum Doors, and Marble Tiling for Turkish Baths, all of which were in use at the Retreat, York. A discussion followed, in which the President, Drs. Ireland, Greenlees, Savage, Hack Tuke, Whitcombe, Hyslop, Needham, Bowers, and Bonville Fox took part. Drs. Strahan and Baker replied.

Dr Hyslop exhibited under the microscope sections showing Leiter's Cells and the Neuroglia of the Brain.

Reviews and Notices of Books.

A Text-book of General Therapeutics. By W. HALE WHITE, M.D., F.R.C.P. Pp. 371. London: Macmillan and Co. 1889.

WHILE admitting that Dr. Hale White has performed good service in the publication of this book, it may be questioned whether some more appropriate title might not have been found, as the above is apt to be misunderstood. The subject is broadly defined by the author in his preface. It is intended to give "an account of modes of treatment which do not fall under the heading of drugs," and the first conception of the book appears to have arisen from lectures delivered at Guy's Hospital. When we consider that, according to the prospectus, the lectures on materia medica and therapeutics are intended to meet the requirements of students preparing for the first conjoint examination and for that of the intermediate M.B., we cannot but marvel at the energy which finds room for dealing with the subjects discussed in this book in the short space of the summer session.

The volume commences with three chapters devoted to general medical climatology, classification of climates, and the treatment of disease by climate. The last is disappointing in its brevity and in a certain lack of precision. The instructions are too vague and too general to be of much use, but a short list of authorities is appended, and the original sources of information can therefore be consulted. The chapter on treatment by compressed air also fails to satisfy. When dealing with Oertel's treatment Dr. Hale White appears to be treading on firmer ground, though it seems rather unnecessary to head the chapter "Chronic Cardiac Disease" when Oertel's book treats of circulatory derangements, and his method is essentially directed against venous stasis. Several continental physicians are quoted in this connexion, but the work of English observers is passed over without a reference. The chapters upon diet contain a good *résumé* of the subject, and show many indications of the wide scope of the author's reading and the freshness of the authorities consulted. There is, however, room for improvement in the arrangement; e.g., the dieting of infants, although often the fruitful source of illness, should scarcely find a place in a chapter on "diet in different diseases." The brief summaries of the uses of the various natural waters, for drinking and for baths, may be of value to those who have not larger books at hand for reference, but the author is clearly of opinion that the part played by these agencies as remedies is, in a large number of cases, secondary to that of the altered diet, compulsory holiday, exercise, fresh air, regular hours, &c., and in this view we entirely concur. The use of cold as an antipyretic has been so often referred to of late that the subject might be deemed dull and uninteresting, but by copious quotations from the writings of James Currie (1797) the tedium is considerably lightened. "The great merit of Currie's work is that he took the temperature of his patients." So on page 174 we meet with an account of his encounter with scarlet fever in his two sons, and how he waged war armed only "with plenty of pump-water and a pocket thermometer." The boys recovered, but the energy of the fray can be inferred from the fact that "the heat rose in the eldest to 109°, in the youngest to 108°." Artificial baths, and "lavage," or washing out the stomach, form the subjects of short chapters, and then comes Massage, of which the author speaks from personal observation. He resists the temptation to use all the pedantic terms by which the various processes have been dignified and mystified, and writes in simple straightforward language, explaining the good results upon sound physiological grounds. On the other hand, he speaks with equal boldness against the universal employment of massage, and uses plain speaking in a way for which he may not readily be forgiven in certain quarters. In dealing with venesection, again, he writes with much energy and conviction. He is as sure that venesection is sometimes the only right treatment as he is that, as formerly indiscriminately employed, it was distinctly harmful. That he should have had the assistance of Dr. Pitt in the chapters on Electricity is sufficient guarantee of their accuracy and trustworthiness; the introduction of the figures showing Ziemssen's motor points further adds to their utility. Metallotherapy and hypnotism naturally fall under discussion, and the differences of opinion between the Nancy school and the Salpêtrière or Charcot school are concisely summarised, but at the end of the chapter the author remarks: "The whole subject of the therapeutical use of hypnotism is in its infancy. We must receive all reports of cases said to have been cured by it with the greatest caution, and probably future experience will show that many authors have exaggerated its value." The suspension treatment of diseases of the spinal cord is noted, and the book is brought to a close by some sensible remarks upon the general treatment of acute diseases, convalescence, and insomnia.

From the above it will be seen that Dr. Hale White employs the term "General Therapeutics" in a very general sense. He wanders a great deal from the ordinary beaten tracks to cull what good he may in many of the bye-paths so often associated with danger signals in the minds of those who are, perhaps, oppressed by an undue abhorrence of mystical methods. That he should have done so, and yet have produced a book which is fairly free from "much that is worthless," is distinctly to his credit. There are marked inequalities of work, but upon the whole the book may save students the trouble of searching for much scattered information, and the brief bibliography appended to many chapters may guide those who desire to consult larger works. The volume is remarkably free from printer's errors and is furnished with a good index.

Studies in Clinical Medicine. Vol. I., Nos. 1 to 8. By BYROM BRAMWELL, M.D. Edinburgh and London: Young J. Pentland. 1889.

WITH the opening of the summer session Dr. Byrom Bramwell commenced the fortnightly publication of a record of his experiences and teaching in the out-patient department of the Edinburgh Royal Infirmary. The publication, suspended during the vacation, has now been resumed with the eighth number. To us in this country the scheme is novel, but in Paris it has been for the past year or so carried out in connexion with M. Charcot's clinique. The object is apparently to enlarge the circle of those who derive advantage from the attendance in these departments, for in the cases selected a

verbatim report is given of the physician's questions to the patient, the latter's replies, the results of the examination, and the more or less extended commentary made by the physician upon the case and the condition it illustrates. It is obvious that the fulfilment of such a task must involve considerable time and pains, but Dr. Bramwell's characteristic energy has enabled him to prepare what is, on the whole, an interesting and useful series of cases. Some of the subjects have been dealt with quite exhaustively—e.g., that of facial paralysis; and there is a liberal use of pictorial illustration of the text. The treatment of phthisis by intra-laryngeal injections of menthol is exemplified in two or three cases, and there is a very interesting disquisition on herpes zoster, and another upon anæmia. The weak point in the "Studies" seems to lie in the questions put to the patients, which are certainly in some cases too obviously of a "leading" character to be of much service in eliciting the actual facts. Nevertheless, the publication is certainly not lacking in information.

Hygiene and Public Health. By LOUIS C. PARKES, M.D., D.P.H. Lond. Univ. London: H. K. Lewis. 1889.

DR. LOUIS PARKES inherits a name which will ensure for him a ready hearing on matters relating to hygiene and public health; and it is evident from the work now before us that he has availed himself of the opportunities at his command to fit himself as a teacher in the subject. The work is another text-book dealing, in the main, with those subjects of which a knowledge is required by medical men who present themselves before the various bodies giving diplomas in State medicine and public health; and, whilst it is somewhat more scientific in its details than some other similar works, it has the great advantage of bringing the information available on a number of matters discussed up to current date. No ordinary text-book on the progressive science of public health can be expected to do much more than give the reader an intelligent insight into the class of subjects which he must make a study if he would become an expert in matters relating to the health of communities; and whilst some subjects in Dr. Parkes' book are well thought out there are others—notably that relating to vaccination, the contentious aspects of which have for some years past been prominently before the public and the medical profession—which are disposed of in a somewhat cursory way. But the work has a distinct value for the purposes indicated.

New Inventions.

AN IMPROVEMENT IN THE STETHOSCOPE.

HAVING experienced some difficulty in getting immediate adjustment of the ordinary stethoscope in very thin persons, and in those who had been the subjects of rickets &c. with rough irregular sternums, the idea of a soft inflated indiarubber cap or ring suggested itself to me. I have used the cap now for more than two years; and learning lately that several medical men and students have adopted it, I

am desirous to make known what advantages I believe it to possess. I originally designed it as a cushion to be put on any stethoscope in auscultating, an uneven chest wall. The cardinal point was, does the cap influence the conducting power of the instrument? I have tried all sizes of caps, on all kinds of stethoscopes, and have come to the conclusion that over wood it does not add to the conduction of sound, but over metal it adds to the acoustic value of the instrument in so marked a degree that I should like auscultators to give it a fair trial and judge for themselves, as it only costs a trifle. Having established, at least to myself, that the conducting power of a metal chest-piece is increased, I am free to state certain other merits which it possesses. First, it gives instant conveyance to the ear of the sound listened to, and can be stamped down, as it were, with a decided movement almost of force (as it cannot hurt), whereas the wood or metal end must be put down carefully and cautiously. In out-door hospital work this will be found a clear gain after a little familiarity in using. Secondly, I have made a point of trying both the cushioned and the bare stethoscope on numbers of patients; and on asking them which instrument they liked best, the answer has always been in favour of the one with the soft end. There can be no comparison in the feeling conveyed in the touch, and this is by no means a trifle, as patients are very sensitive over these matters. In conclusion, I may say that the binaural stethoscope with the metal upper part and metal spring, pear-shaped ear-pieces—not globular, as I and others have had to consult the aurist from using the latter—plain indiarubber tubing of large calibre—not small, as it warps or kinks—with an indiarubber cap over its metal end, forms the best stethoscope with which I am acquainted. Messrs. Mayer and Meltzer, Great Portland-street, have made the caps to my entire satisfaction, and they keep them in stock.

Weymouth-street, W. JAMES MURRAY, M.D., &c.

A NEW FORM OF BANDAGE FOR USE AFTER AMPUTATION OF THE BREAST OR ANY OPERATION ABOUT THE CHEST.

THE accompanying illustration represents a new form of bandage which I have devised and used after amputation of the breast and other operations about the chest. After an extensive trial I have no hesitation in saying that the bandage is a great improvement upon the ordinary method

FIG. 1.

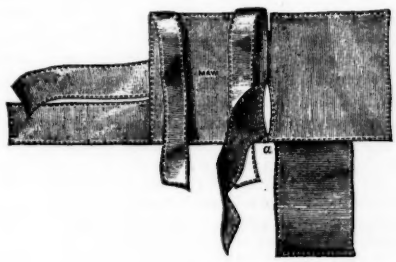


FIG. 2.

adopted for bandaging patients after operations on the chest. The bandage is so arranged that it acts not only as a support to the parts operated on, but also forms a most comfortable sling for the arm. It is furnished with shoulder-

straps, which prevent it slipping. The slit (a) at the side of the bandage allows of the appendage, which forms part of the sling, being passed through, according to the side for which it is required. The advantages claimed for this bandage are obvious. 1. It can be applied most easily and with the least possible disturbance to the patient. 2. During the after-treatment the wound can be examined as often as necessary without disturbing the patient in the least. 3. Pressure is maintained evenly over the whole chest. 4. The arrangement for fixing and slinging the arm is most efficient and comfortable. This bandage may be applied and will be found most serviceable for many other uses than that for which I have designed it—viz., fractured clavicle, fractured ribs, or any mischief or injury to the shoulder-joint in which it is all important to keep the arm at perfect rest. The illustrations represent the bandage (Fig. 1), the pattern (Fig. 2), as seen when applied. The bandage is now being made by Messrs. Maw, Son, and Thompson, in three different sizes.

Upper Wimpole-street, W. F. BOWREMAN JESSETT, F.R.C.S.

REPORT OF THE COMMISSIONERS OF PRISONS.

THE report of the Commissioners of Prisons for the year ending March 31st, 1889, shows the number of prisoners received during the year to have been 153,963 under sentence of the ordinary courts, 1222 soldiers and sailors sentenced by courts martial, and 8664 debtors, or imprisoned on civil process, making a total of 163,849. This shows an increase of nearly 7000 upon the numbers of the preceding year, and has occurred chiefly in prisoners under the sentence of the ordinary courts. The average daily number in prison was 15,255, of whom 12,673 were males and 2582 females. The cases of sickness treated in hospital of male prisoners were 3324, or 262 per 1000 of mean strength, and 1274, or 493 per 1000, of the females. The deaths of the males, exclusive of 19 executed, were 107, or 8·44, and of the females 21, or 8·13 per 1000; no female was executed. But this does not show correctly the liability of the prisoners to death, for there were 54 males and 21 females released on medical grounds. Of the latter, however, 11 were on account of pregnancy, thus reducing to 10 the number on account of disease. Of the male prisoners, 26, or nearly one-half, were released on account of phthisis or tuberculosis, but only three of the females. These cases, if retained for the full period of their sentences, would doubtless have added materially to the death-rate. The medical inspector, Dr. Gover, complains that "it not unfrequently happens that persons who are in an advanced state of disease, and even dying, are sent to prison," and suggests that such cases should be taken to the nearest hospital or to the workhouse infirmary, and not to prison. But such a course would probably lead to a considerable amount of malingering. They can be equally well, or perhaps better, treated in the prison infirmary, under the care of the medical officers who are well accustomed to such cases. It is true the other course would make an apparent reduction in the prison death-rate, just as the discharges on medical grounds do; but this is really of no importance, for it would not in any way benefit the unfortunate prisoners. Among the causes of death, suicide is assigned for 12 males and 3 females, being respectively in the ratio of 0·95 and 1·16 per 1000, which seems a high proportion; but no details are given of the cases or of the manner in which the act was committed. There were 349 cases of insanity during the year, of which 210 were removed to asylums; 93 are stated to have been found insane upon reception, and 59 to have originated in prison. Of the other cases, it is said that "it is highly probable that although insanity was not immediately recognised, yet that it really existed on reception in a majority, if not the whole of them." Dr. Gover remarks: "The local prisons of England and Wales are at present used to some extent as hospitals for the treatment of mental and bodily disease, but as they are not intended for or adapted to that purpose, it is advisable that the practice in vogue should be discontinued as far as possible." We can hardly suppose that he means that convicted prisoners labouring under bodily disease should be exempted from undergoing their punishment of imprisonment on that account; and, as regards mental disease, the fact of 256 cases having occurred in which no such state was detected by the prison medical officer on admission justifies an opinion that the abnormal mental condition could scarcely have been ascertained before the prisoner was sentenced. Under such circumstances, it is difficult to understand how the prisoners could have been dealt with more satisfactorily in the interests of the public and for their own benefit.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE autumn general meeting of this Association took place at 11, Chandos-street, London, W., on Thursday, Nov. 7th. Dr. Richard Fegan (Blackheath), President, was in the chair. Sir Thomas Crawford, K.C.B., was amongst the guests.

The Chairman of Council, on behalf of the members of Council, presented to Mr. James Stewart an illuminated address and a handsome clock, in recognition of his labours for the Association as one of its hon. secretaries for the last five years, and as a mark of their personal regard. An alteration of Rule VII., enabling the Council to increase the number of hon. secretaries, was then proposed, seconded, and adopted. On the proposition of Mr. Stewart, a vote of sympathy was passed to Dr. John Eadie of Yeovil, a member of the Association, on the occasion of the false charge to which he had been recently subjected. On the motion of Dr. Abraham, hon. sec., seconded by Sir Thomas Crawford, a vote of congratulation to Sir John Thomas Banks, K.C.B., a Vice-President, and former President, of the Association, was adopted, on the occasion of the distinguished honours of which he has recently been the recipient.

On the same evening fifty-four of the members and their friends dined together at the Holborn Restaurant, the President in the chair. After the loyal toasts had been given and received with musical honours, Dr. White proposed "H.M. Services," which was responded to by Surgeon J. O'B. Williams, R.N., and Surgeon-major Norton, Commandant, Volunteer Medical Service. The toast of the evening, "The Association," was given by Professor Curnow, and acknowledged by Dr. Gilbart Smith. "The President's Health" was proposed by Sir Thomas Crawford, and one or two other speeches followed. A musical programme of part-songs, &c., was contributed by Messrs. W. B. Martin, Cummins, R. and H. Turner, Taylor, Bentham, and Drs. P. S. Abraham, Brown, and Campbell Pope.

MEDICAL DEFENCE UNION.

A LARGE and influentially attended meeting of medical men was held in the Council room of the British Medical Association on the 8th inst. Mr. Lawson Tait, the President of the Union, occupied the chair. It was resolved to form a metropolitan branch or division, with Dr. T. Bridgwater as President and Dr. Campbell Pope as Secretary. Vice-presidents, council, and executive were also elected. The lines upon which the branches of the Union are conducted are: The branch shall be practically automatic, the Central Council of the Union retaining the right to veto improper proposals or proposals which would lead to greater expenditure than the financial position of the Union justified. The president and secretary of the branch are *ex officio* members of the Central Council, of which there is a standing emergency committee in London, having power to deal with applications from members for assistance and to take initial proceedings. It is the experience of the Union that if charges improperly brought against medical men are met with an *immediate* bold front, and an offer made by return of post, in the name of the Union, to accept service on behalf of the medical man, the matter at once collapses, and immediate action is therefore the policy of the executive.

All further information may be obtained from the Secretary of the Metropolitan Branch, or from Dr. Leslie Phillips, Birmingham.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 16, 1889.

THE important address on a new antiseptic dressing, which Sir JOSEPH LISTER delivered before the Medical Society of London on the 4th inst., was printed *in extenso* in our last week's number, and has already been studied by many thousands of our readers. It presents the results of a long, laborious, and—as it would appear—triumphantly successful series of researches in the field of science with which the name of the illustrious author will for ever be connected. The history is in itself a revelation of the scientific acumen, perseverance, and minute attention to details which are required for the perfection of such a work, and it furnishes a valuable lesson to any surgeons who may be inclined to forget the extreme importance of real and thorough scientific knowledge in their branch of the profession. No one without great chemical knowledge could have even attempted with any chance of success such labours as those by which Sir JOSEPH LISTER has revolutionised surgery. Many a modern student who now contents himself with the hastily-acquired and ill-digested smattering of chemistry that satisfies the Board of Examiners will hereafter grieve to find himself unable even to understand the train of new triumphs which pass before his eyes.

The present address, in spite of its modest title, carries on the history of the author's work from the date—now five years ago—when he last addressed the Society. At that time he had shown not only that corrosive sublimate formed a compound in the albumen in which the properties of the former were preserved, but that this compound, even after drying, was capable of dissolving in blood serum. Hence came the sero-sublimate gauze, which had a definite and admitted value. But certain defects soon revealed themselves in the gauze, which was somewhat harsh and not very absorbent. So the investigator pushed on, and sought for new agents. The first that offered was substantially the double chloride of mercury and ammonium, called sal alembroth. This presented great advantages; it was a better antiseptic, and at the same time was less irritating than corrosive sublimate. But again objections turned up, for the compound was so soluble, not only in water but in serum, that when the discharge was considerable too much of the mercurial compound got to the edge of the dressing, and great irritation was caused. So another start was made with cyanide of mercury. This was found to be, in the author's language, high as to inhibitory, but low in germicidal, power. But it was irritating as well as very soluble, and the double cyanides—of which, without counting such bodies as the errocyanides, there are many—were next tried. Mr. MARTINDALE suggested one of the insoluble double cyanides of mercury and zinc; such a compound has proved superior to all other substances hitherto used. There are several of these double cyanides, and they have recently been investigated by VARET, whose papers in the *Comptes Rendus* are doubtless familiar to Sir JOSEPH LISTER. There seems indeed some doubt as to the precise compound which exists in the preparation which is now used; but it is certain that the mercury in it is an important, though not in quantity a large, factor. The very ingenious method by which, after many trials, the substance was incorporated with starch, with which it forms a kind of combination whereby it can be affixed to gauze so neatly that in the dry state it does not become detached, and in the wet state does not wash away, and the apparently perfect success of the gauze, which is at once antiseptic, porous, permanent, and non-irritating, the address describes in detail, and we need only here refer to it.

But even the zinc mercury cyanide was not immediately successful, and some early difficulties caused it to be for a time abandoned. Then the patient investigator turned his attention to iodide of mercury. This is known to have antiseptic powers, and is besides very sparingly soluble in water. It is more soluble in blood serum, but then it is very irritating and difficult to fix to the gauze. The latter objection was removed by the employment of starch, then tried for the first time. Here, as with the double cyanide, a loose kind of molecular combination seems to take place, and the iodide does not dust off. But still the experimenter was not satisfied, and therefore, with the experience gained from the starch experiments, fell back on the double cyanide, with which, under carefully prescribed conditions, he is for the present contented.

With the full text in their hands our readers will not care for a fuller summary of this masterly history than this brief sketch. But enough has been said to show that if the new discoveries given to the world are of profound moment to the surgeon, they are scarcely less interesting to the physiological chemist and the biologist.

THE outbreak of enteric fever at New Herrington,[1] on which Dr. PAGE has just reported to the Local Government Board, has acquired considerable notoriety: first, because of its suddenness, no less than 100 cases occurring in the first nine days; and, secondly, because it appeared to simulate the outbreak of "pneumonic fever" which caused an epidemic at Middlesbrough-on-Tees in the spring of 1888. Indeed, Mr. PARK, the medical officer of health of the northern division of the Houghton-le-Spring rural district, in which New Herrington lies, who first discovered this peculiarity, had his misgivings as to this confirmed by Dr. PHILIPSON of the Newcastle School of Medicine. It appears that the first cases met with presented symptoms of pleuro-pneumonia only, or those of enteric fever ushered in by pneumonia. Some cases, too, began and ended with pneumonia only, a few multiple cases of this sort being observed to occur in the same house; others, again, amounting to nearly one-third of the attacks, had distinct pneumonia, and it was only on its subsidence that enteric fever symptoms were observed; and, lastly, there was a proportion of cases, of a sort not uncommonly met with, in which pneumonic complication ensued at a comparatively late stage of genuine enteric fever. The pneumonic symptoms were also, in each of the classes referred to, more common during the early than in the later stages of the epidemic.

[1] Eyre and Spottiswoode, East Harding-street, E.C.; A. and C. Black, Edinburgh; Hodges, Figgis, and Co., Dublin. Price 6d.

Thus, the prevalence was, from this point of view alone, one of interest.

The discovery of the cause of the epidemic also involved several noteworthy considerations. Before dealing specifically with the cause it must be explained that the outbreak involved a series of villages connected with collieries belonging to the Earl of DURHAM, that these villages had nothing in common as regards sewerage or drainage, and that the question of milk as a vehicle of the infection could with much certainty be excluded. But whereas 258 attacks of enteric fever were discovered amongst some 4400 persons living within the area of the Herrington water-supply, only seventeen attacks could be heard of during the same period amongst no less than some 12,000 neighbouring people living within the area of the Houghton supply. And this incidence of the disease upon houses supplied with the Herrington water was made out the more clearly as it was ascertained that villages lying within the epidemic area, but getting their water from other sources, remained quite free from the fever. Amongst other striking points in this connexion there is also the fact that the distribution of the disease in point of time varied with the distance at which people lived from the source of the water, those taking supplies from mains nearest to the reservoir being the first to suffer from the disease.

The Herrington water is derived from a well sunk through clay and other formations into the sandstone strata of the coal-measures to a total depth of 330 ft., the sides of the well being lined with bricks set in mortar, this steining being regarded as impervious, and all the water being looked upon as entering from the bottom of the well. Inquiry into the precise distribution of the fever showed, however, that any pollution to which the supply might have been subjected must have occurred before its distribution from the reservoir into which it was pumped from the well, and, after eliminating several possible sources of mischief, investigations were made as to possible pollution of the well itself by reason of contamination from such sources as the deposit of human excreta as manure on the land adjoining. But while this was being investigated the well itself was opened, and, contrary to anticipation, it was found that a feeder of water was entering through the brickwork at the rate of twenty-two gallons per minute; and this accidental supply exhibited nearly twice the amount of chlorides that was found in the well water as a whole.

Several experiments were next made with a view of tracing the source of this water flowing from the feeder, and ultimately it was decided to ascertain whether soakage towards it could take place from a farmhouse and buildings at Herrington Hill, where closet contents and liquid refuse found an escape through a fissure in the magnesian limestone, this fissure being at a higher level than, but at a distance of no less than three-quarters of a mile from, the well. This was done by means of common salt, two tons of which were thrown down the fissure on May 11th. Excess of chlorine in the water from the feeder as compared with the well water was soon discovered, and between May 24th and 29th daily testings were made, with the result that the amount of chlorine per gallon rose from 2 3 to 6 grains per gallon. Five tons of common salt were next washed down the crevice with a hose pipe, and by June 5th the chlorine reached 24 grains per gallon. Here, then, was the source of pollution, but unfortunately no information could be procured as to the origin of any specific excreta having had opportunity of being mingled with the polluting matter which had had access to the well.

The history given is instructive on another point—namely, the difficulty of securing evidence as to water contamination of a mischievous sort by mere chemical analysis. On April 24th the verdict of the chemist was that it was "a good water for drinking"; on May 3rd a second sample was reported on, when to the same statement it was added that the water was "very free from organic impurities"; and a third sample was stated by the same chemist to be "quite suitable for drinking purposes." But, samples being sent to another chemist, the analyst was led to seek for any indications which the microscope could afford, and, on the strength of the discovery of such things as starch granules, cloth fibres, broken hairs, and other evidences of household refuse which could hardly have got access to the water except through sewage, he very properly declared it to be dangerous. And, as the result showed, this view was correct. In two samples examined an excess of albuminoid ammonia was discovered, which also pointed to sewage pollution of recent date. But three other samples indicated no such excess, this indication of mischief being apparently an intermitting one. Whilst, therefore, the positive evidence afforded by chemistry was of distinct avail, by way of leading to further investigation, the negative evidence was misleading in so far as the detection of the danger was concerned; indeed, this latter form of evidence as to potable waters can rarely be relied on in connexion with the etiology of disease.

THE recent legal proceedings in Glasgow, Belfast, and elsewhere with regard to the sale of meat affected by tuberculosis have naturally directed attention afresh to the question of the contagiousness or otherwise of the disease. Few questions are more worthy of the most anxious attention, and few seem so difficult of satisfactory elucidation. Since from one-fifth to one-seventh of the human family succumb to tuberculosis in its various forms, and since the disease when well established is one of the most formidable nature, the questions of its etiology and of its preventive treatment are of overwhelming importance. Yet, although the discovery of KOCH is now a good many years old, and its substantial accuracy is no longer seriously questioned, we are still far from having attained a much to be desired unanimity regarding its clinical significance and its practical bearings. The difficulty arises largely from the fact that on this question pathology and clinical observation seem to speak with discordant voices. The former shows strong *a priori* ground for expecting that tuberculosis should be contagious; the latter very feebly, if at all, confirms this expectation. The pathologist seeing in a specific virus the cause of the disease, and perceiving the unlimited facilities offered for its dissemination, is naturally predisposed to regard tuberculosis as infective. The clinical observer, on the contrary, finds that to him the most striking features of the disease are its dependence upon hereditary taint, upon unhealthy modes of life, upon malnutrition and the like; and he is at a loss to discover sure

instances of its transmission from one individual to another, although the opportunities for such transmission are unhappily only too abundant. If the attention which is now being given to the question of the transmission of tuberculosis from animals to man should avail to throw new light upon the wider question of the contagiousness of the disease, it will have been exceedingly well bestowed.

It is believed by many able pathologists that these two apparently discrepant views of tuberculosis are in reality quite reconcilable, that the apparent opposition between them is like the dispute in the fable as to whether the shield was made of gold or of silver. One observer saw only one side, and forthwith proclaimed that it was made of gold, while the second observer who saw only the opposite side was equally convinced that it was made of silver. It did not occur to either disputant that his opponent was right as well as himself. Hence it may be suggested that tuberculosis has its resemblance on the one hand to the communicable diseases, and on the other to those maladies of which impaired nutrition is the most essential feature. It may be argued with much apparent plausibility that just as some maladies, such as measles or small-pox, seem to find a suitable nidus in almost everyone exposed to their influence (unless protected by a previous attack or by vaccination), and in these cases individual susceptibility offers only very slight variations, so there are other diseases, such as diphtheria, where susceptibility is relatively much more important, and there may be diseases where susceptibility is really the main question and the presence of the virus relatively unimportant. There can be little doubt that predisposition, whether of constitution or of environment, is the main feature in the etiology of tuberculosis, but we must not let this conclusion, borne in as it is upon us by such a multitude of facts, blind our eyes to the truth that predisposition is not causation.

Any inquiry into the *vera causa* of tuberculosis is greatly impeded by the natural history and course of the disease. The infective fevers, which from the dawn of medicine have been readily recognised as communicable, have such a defined onset and comparatively rapid and fixed course that it is very often easy to point to the reception of the virus and to its development during the period of incubation. But tuberculosis is commonly one of the most chronic of maladies, beginning not unfrequently by vague signs of failing health, and pursuing an erratic and uncertain course. Hence any attempt to point to the source of infection is embarrassed by very peculiar difficulties. The facts also that tuberculosis affects one epoch of life above all others, that of adolescence and puberty; that epidemics of it are unknown; and that, although nothing is more familiar than to see it attacking one member of a family after another, it is somewhat unusual to see it affecting two members of the same family simultaneously—such facts raise difficulties in the way of any infective theory. It may be that their true importance is only to emphasise the large part played by predisposition.

The suggestion of the communicability of tuberculosis and its dependence upon the specific virus naturally raised the strongest hopes of a new and fruitful departure as regards preventive and curative treatment. It must be owned that these hopes have been doomed to disappointment. The antiseptic treatment of phthisis, begun with so much hope, has not prospered even in the hands of its warmest advocates, and is probably now being quietly dropped by the majority of those who are sufficiently unprejudiced to refuse to become the victims of a preconceived idea. Inhalations by the respiratory passages, injections per rectum, the air of pine forests, carbolic acid, creasote, fluoric acid, and a host of other such remedies have had their trial, and the result has been disappointing. We are still forced to rely for success mainly on measures that seek to diminish susceptibility and to increase the constitutional resistance to the disease, on tonics, high feeding, analeptic measures generally, and change of climate.

If the present attitude of the profession in this country towards the question of the communicability of tuberculosis is still one of expectancy and suspended judgment, we must be content simply to take stock of our present knowledge, and to await further light. Pathology and clinical observation must go hand in hand, and it is not too much to hope that the great scientific activity of the present age may within a reasonable time succeed in removing the apparent opposition now subsisting between them in connexion with the subject of tuberculosis.

Annotations.

"Ne quid nimis."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

ONCE more has the annual meeting of the Fellows and Members been held at Lincoln's-inn-fields, and again has the assembly pronounced its verdict on the inadequate representation of the body corporate on the governing body of the College. The newly-elected President of the Council (Mr. Hutchinson), in his able address, endeavoured to defend the present attitude of the Council and the policy of the governing body. He stated that the College Council enjoyed the *advantage* of having at its meetings more than half of the Court of Examiners, and emphasised the jealous guardianship of the College Council over the legitimate interests of the Fellows and Members of the College. Mr. Hutchinson noted with fairness that by the introduction of the use of voting papers, the number of Fellows taking part in the annual College election has more than doubled. He naturally dwelt upon the advantages of the National Museum at the College, and eulogised the present standard of examinations insisted on by the Council of the College and by the authorities of the College of Physicians. He stated that the number of candidates for the diplomas of Member and Fellow continued to increase, and implored the meeting not to waste its time or strength on possibly unprofitable pursuits. Then followed the very significant resolution of Dr. Elliston and Dr. Danford Thomas: "That this meeting of Fellows and Members of the Royal College of Surgeons of England, having considered the report of the Council dated Oct. 17th, 1889, is of opinion that immediate steps should be taken to forward the introduction early in the next parliamentary session of a Bill to amend the constitution of the College, so as to secure to the Members a just representation in and upon the governing body of the College." If the exercise of the function of issuing qualifications to practise were the whole and sole *raison d'être* of any college, we should certainly endorse the opinion of the Council; but we have contended, and shall continue to contend, that this is but one element

in collegiate existence, that far wider interests and aspirations are involved, and that the reasonable demand for enfranchisement on the part of the Members has to be met by the Council, and must be granted. Is it not strange for any College to point with pride to the excellence and stringency of its examination tests, to the very fine sieve employed at the College for separating the good from the bad, and then to deny to the good, who have reached or even surpassed this standard, the elementary right of representative government? The Council of the College of Surgeons has a great opportunity *now* for admitting, without danger to its prestige, the claim that Membership should carry with it further rights than that of a mere right to practise, and for gracefully yielding to the necessity of our times. Such a policy more than any other would tempt young men nowadays to become Members of a reformed College. It is true that the governing body of the College welcomed the Members on this last occasion with more than usual cordiality, and that those present were entertained at an afternoon tea. The enfranchisement of Members of the College, the right of meeting in their own house, and the abolition of obsolete bye-laws are modestly-conceived reforms; to gain these rights every legitimate effort must be made. There can be no doubt that the present position of the College of Surgeons, as a close corporation, is neither an enviable nor a tenable one. For the credit of the College, as well as for the real dignity of every Member of the College, we should be glad to see peace and quietness restored; but how can there be peace so long as the points at issue are being tenaciously fought for? It is a trial of strength between the many and the few, and, for certain, the weaker side will have to go to the wall.

AUSTRIAN MEDICAL LEGISLATION.

A VIENNA Medical Association has petitioned the Austrian Legislature for certain amendments in the new criminal law now before Parliament. The first clause it wishes to see amended imposes a fine equivalent to £10 on all physicians and midwives who, in cases of emergency, refuse or delay their help without sufficient reason. The association asks that no prosecution should take place except when this refusal or delay has resulted in distinct harm to the patient, as in such cases only it can be proved that there was any real emergency. The association also takes exception to the expression "delay," as this gives an unlimited latitude to malevolent people, whose sole object is to harass both authorities and medical men. The next clause to which the association takes exception imposes in the first instance a fine of £10, and in cases of repeated prosecutions a fine of £20, or imprisonment, on all people who, without the possession of the proper licence, practise for gain, sell drugs, perform circumcision according to the religious rite, or act as midwives. The petition points out that employing quackery as a means of gain can rarely be brought home to the accused, and that in any case it is the duty of the State not merely to punish quackery, commercial or otherwise, when it has been proven, but to make any kind of quackery impossible by preventive measures. As the best means for this purpose the association wishes to have the words "for gain" struck out of the law. Another clause which has given offence to the Viennese medical men imposes a fine of not more than £20, both on the chemist who makes or offers a present to a medical man for sending him prescriptions, and on the medical man who accepts such presents. Why should it, for instance, be wrong, ask the petitioners, for a chemist to send a medical man medicines, especially new preparations, for the poor or for clinical use, free of charge, even if he avowedly does so in acknowledgment of his general support? All our clinics, say the association, all our great institutes, all our busy professors and general practitioners, gratefully accept such presents, and use them for their sick poor. It would be an incalculable loss to the whole poor population if a law were passed to prevent such presents. But even if a medical man receives a present from a grateful chemist, whose business in the neighbourhood he has intentionally or otherwise supported, why should he be treated as a criminal, for the transaction is not to the disadvantage of anybody? The greatest interest, however, centres in those clauses in the new law referring to malpraxis, and the petitioners profess to see no necessity for any increased stringency such as is proposed in these new clauses. They consider that as even the present comparatively mild law has been made the source of great annoyance and loss to many perfectly innocent medical men, a prosecution should only be allowed in cases of really culpable neglect. It is a sad fact, the petition points out, that the worst and most calumnious accusations are made with a light heart, the theory of neglect being easily accepted, and so leading to a prosecution, when nothing but an unfortunate accident or, perhaps, the neglect of the patient himself or of his friends, has led to some lamentable result. The association proposes that in every case of accusation for malpraxis, a well-known responsible medical authority or the nearest medical faculty should be consulted before a public prosecution is instituted.

A NEW MEDICAL INSTITUTE.

THE building now being erected by the Royal College of Physicians and the Royal College of Surgeons adjoining the Examination Hall comprises a theatre capable of accommodating 400 persons, and laboratories to be devoted to scientific investigations in pathology and therapeutics. The recommendations of the committee appointed for the purpose and adopted by the Colleges are to the effect that the management of the building be entrusted to a Laboratories Committee of six members, three to be appointed by each College. This committee will nominate a director, who will be annually appointed, and re-eligible for seven years, after which period he will be ineligible except by a special vote of the two Colleges on the recommendation of the Laboratories Committee. It was also agreed that Mr. Hallett should be appointed secretary to that committee, and have the general superintendence of the building; and it was decided to make application for the registration of the building under the Act 39 and 40 Vict., cap. 77 (1876). The following are the conditions relating to the use of the laboratories:—"1. Permission to work in the laboratories shall not be restricted to those whose names are on the Medical Register. 2. All applications for permission to work in the laboratories shall be made to the director in the first instance, and shall be submitted by him to the committee at its next meeting for decision. 3. When such application is made a description of the proposed investigation shall be sent in, with as complete a list as possible of the necessary instruments and apparatus. 4. No research, other than that originally approved by the committee, shall be undertaken without their previous sanction. 5. The publication of the results of work done in the laboratories shall be under the control of the committee. 6. Workers in the laboratories shall not receive pecuniary remuneration for work done, but the expenses of investigation approved by the director will be defrayed by the Colleges. 7. No purchase of instruments or apparatus shall be made without the sanction of the Laboratories Committee. 8. All instruments or apparatus provided by the committee are the property of the Colleges, and shall under no circumstances be removed from the laboratories." At the meeting of the College of Physicians, when this

report was received, the question was raised whether some provision might not also be made for enabling members of the Colleges to carry out such chemical and histological investigations as they might require in connexion with their clinical observations. The suggestion is certainly one worthy of adoption, and it is to be observed that the space devoted to the laboratories where original research may be prosecuted does not absorb all the rooms at the disposal of the Colleges, so that no difficulty can be apprehended on that score. The Edinburgh College of Physicians has already set a good example in this respect, for, as may be gathered from the report of its director, Dr. Woodhead, the work done in its laboratory not only consists in original investigation, but in the furnishing of reports upon tumours &c. sent to the laboratory for examination. We may hope that the new London Medical Institute will thus, in more than one respect, fill a gap in the scientific institutions of the metropolis.

EXAMINATIONS FOR HOSPITAL APPOINTMENTS IN LYONS.

THE medical school of Lyons has an excellent reputation, and, though in France there is always a tendency to centralise everything in Paris, it is, we believe, generally held by students that the examinations in Lyons are quite on a par with those of Paris itself. Dr. Augagneur, the editor of a Lyons medical journal which is not slow to point out abuses, has just printed a leading article calling attention to the unsatisfactory way in which the competition for the much-coveted resident posts—the *internat*, as it is called—is conducted. These examinations are oral. At the late competition the candidates had to express their views—in five minutes—on the following three questions:—The treatment of penetrating wounds of the thorax, of comatose uræmia, and of the hæmorrhages caused by the abnormal position of the placenta. Dr. Augagneur remarks that, owing to the scanty time allowed, it was impossible for the students to express any opinions they might have formed, and to justify them; all they could do was to recite some aphoristic phrases which unfortunately were not those expressing the opinions of the majority of medical men of note, but those believed to correspond with the more or less original or peculiar views known to be held by the members of the jury. The plan adopted is for each of the seven judges to mark the candidates entirely according to his own judgment, the maximum marks for each portion of the examination being twenty. At the conclusion of the competition the marks are added up, and whoever has obtained the highest total number is declared the winner. This would be just if all the judges were to act honourably and to mark the candidates fairly; but this is what Dr. Augagneur declares they do not do, and he says that it is notorious and fully admitted in general private conversation that marks are obtained as much by favouritism as by merit. He further says that there is a coterie of those belonging to the "clerical party" who always do their best to help one of their own set to place; the judges belonging to this party know the students who also belong to it, and, what is of more importance, they know also the questions which these students have prepared. Of course, favouritism on one side tends to provoke reprisals on the other, so that a man who is marked too highly by certain judges will be marked too low by others. As an example of this, the case of one candidate is mentioned who in one judge's list was twelfth, while in that of another he was twenty-fifth. The only suggestion made by Dr. Augagneur for the improvement of the present state of things is that the method of voting should be altered. Probably the English system of making most competitions depend mainly on the result of paper work combined with practical exercises would not suit the French taste any more than the French competitive orations would suit us.

THE ELECTION AT CAMBRIDGE OF A REPRESENTATIVE ON THE MEDICAL COUNCIL.

NEVER, we suppose, before has there been such a poll for a representative on the Medical Council as at the recent election at Cambridge, when 194 votes were given for Dr. Macalister and 140 for Dr. Latham. At Cambridge, as at Oxford, there being no executive committee or council of the Senate, each question has to be decided by the whole body of the Senate, which is a very large one. On no former occasion, however, has there been any contest, Professors Bond, Paget, and Humphry having been successively elected at Cambridge, and Professors Acland and Rolleston, and Drs. Chambers and Church, at Oxford, without opposition. Such unanimity is not, however, always to be expected. One of the candidates, Dr. Macalister, had the support of the Medical Faculty and a large proportion of the residents. The other candidate, Dr. Latham, had the support of several heads of colleges and many senior members of the Senate. Some members of the College of Physicians, where he is one of the Censors, took an active part among the medical graduates in London on his behalf, and several other non-resident members of the Senate voted for him, not, however, in sufficient force to counterbalance the preponderance of the residents in favour of Dr. Macalister. This new member of the Medical Council was Senior Wrangler in 1877, and is one of the very few who have attained that highest academical distinction and subsequently devoted themselves to Medicine. He is fellow and medical tutor in St. John's College, physician to Addenbrooke's Hospital, and Lecturer in Medicine in the University, as well as secretary to the Medical Board. He is a Fellow of the College of Physicians, and recently delivered the Croonian Lectures on Fever. He is also the translator of Ziegel's "Pathologische Anatomie."

TUBERCULOSIS IN MEAT.

THE Health Committee of the Sheffield Town Council have had before them the request of a deputation of butchers that in the examination of carcases of suspicious quality the medical officer of health should be assisted by a jury of three butchers and a veterinary surgeon appointed by them. The committee reported to the Council that they could not assent to this proposal, since the Public Health Act of 1875 imposes this duty upon the medical officer of health and the inspector of meat. The Committee also passed a resolution requesting that in the case of legal proceedings being taken with respect to the condemnation of any carcase, the medical officer of health be empowered to obtain such "scientific evidence as he, with the authority of the chairman, may think necessary in support of the proceedings." Mr. W. H. Hill, Vice-President of the Sheffield Butchers' Association, forwarded a communication to the Health Committee on the resolution adopted by that body respecting the two carcases which had been condemned by the medical officer of health. Mr. Hill maintains that a medical officer of health cannot from his professional training and duties have acquired such a complete knowledge of the diseases of cattle as either a jury of respectable butchers or a veterinary surgeon. With respect to one of the carcases condemned on Sept. 19th, there was no question as to its being advanced in disease and rightly condemned; but in the other the disease was in a mild form, the tubercles being small and scanty, and the meat healthy in appearance. Reference is made to a third carcase which had been condemned, but where portions of the flesh were examined by

Dr. J. W. Martin and by Dr. G. Newton Pitt of Guy's Hospital, the latter stating in his report that there were no tubercle bacilli and no evidence of disease in the meat submitted to him, adding that this, together with the naked-eye appearances "justified a positive opinion that the joint was fit for human food."

ABUSE OF MEDICAL CHARITIES IN BIRMINGHAM: A PROTEST.

THERE has lately been a very strong feeling of dissatisfaction among medical men in Birmingham at the enormous growth of out-patient charity in hospitals; and a meeting of about fifty practitioners was recently held there, with a view to make a powerful appeal to the public on the subject. We hope the profession will be unanimous in its protest. The *Birmingham Gazette* of the 6th inst. contains a quiet and impressive article on the subject. It summarises the views of these practitioners to the effect that, whereas the population of Birmingham has increased only 35 per cent. during twenty years from 1867 to 1887, the patients treated in the local hospitals have increased 137 per cent. It is contended that the hospital system, regarded as a charitable agency, has far exceeded all reasonable limits. It is well pointed out that the Hospital Saturday Fund, so much promoted by our lamented friend, Sampson Gamgee, and so well intended by him and others, has not been without harm in a way that we have often pointed out. Such schemes beget in the minds of working men an idea that they are paying for hospital treatment, and may therefore go to a hospital for everything. True, they are trying to make a contribution to the payment of hospital expenses; and all honour to them for that. The fallacy is in thinking that they are paying for ordinary medical attendance. They are paying for the treatment of grave sickness or accident that may overtake them, or their fellow-workmen, or their families, but no more. Their Hospital Saturday contributions are a charity—not a contract. The subscriber of a guinea or five guineas does not buy a right to have his family's ordinary ailments treated; neither does the working man, and he degrades his subscription by putting that construction on it. We wish this Birmingham movement every success. London must soon follow suit.

EXECUTION BY ELECTRICITY.

THE law recently passed in New York State determining that criminals sentenced to death shall be executed by means of an electrical shock remains up to this time inoperative. There is at the present moment a prisoner under sentence for a capital crime, and although the time usually allotted to criminals of this class has passed he is still in the land of the living, and is still left to the endurance of the pangs of hope and of doubt which must befall a human being in so fearful a position. It is impossible to think of any ordeal more terrible than such a delay—a delay the more reprehensible because it depends on experimental hesitation as to the success of the proposed new method. The electricians themselves—that is to say, the best and most accomplished of them—do not take to the experiment. They feel that if it were a success it would not add to the honour of electrical science, but would rather take away from the credit that science has acquired as an agent for the amelioration of human misery. They are jealous of a truly noble art degenerating in the hands of the common executioner, and they are not certain that the electrical discharge will always, under the particular conditions required, perform the task demanded of it without some risk of mishap. It might not always kill the man it is intended to kill, and it might by accident kill where it was not designed to kill. Still more, a great many persons believe, and rightly believe, that the present method of capital punishment, rude as it is, and from such veritable rudeness deterrent to some minds, is not, after all, a more painful mode of death, when it is carried out properly, than the proposed new mode. From all these causes of doubt there springs the present delay. The infliction of death by the new mode in the culprit under sentence has been called in question, and the learned judge who tried the case has been appealed to. He refuses to interfere, on the ground that, the sentence having been passed and the mode of death declared in accordance with the law of the State under which he administers justice, any change or reversal of his judgment must come from a higher legal authority. There may consequently be another appeal to the "General Term," and if that reaffirms the mode of carrying out the sentence the question may finally be referred to the Supreme Court, unless, meantime, the Legislature interferes and gives full powers for the new method to be rendered absolute in its application, in all States which, like that of New York, may choose to adopt it. It is to be hoped that the common sense of the State of New York will put an end to the whole of the difficulty, and that the sentence on the miserable prisoner may be commuted.

THE VESSELS OF THE VALVES OF THE HEART IN MAN IN HEALTH AND DISEASE.

A MEMOIR with this title has just appeared in the report published by MM. Ranvier and Malassez on the work done in the Histological Laboratory of the College of France during the year 1888. The author of the memoir is M. Darier, and in his introductory remarks he observes that very different opinions have been expressed at different times, and that the question of the existence of vessels in the valves may still be regarded as under discussion. Apart from its interest as a pure matter of anatomical investigation, the fact of their existence or absence is one of considerable pathological importance in view of the frequency of valvular lesions in different diseases. The earlier French writers do not seem to have had their attention drawn to the point, no reference being made to the presence of vessels by Sénac, Meckel, or Bichat. Gerlach in 1848 remarked that the endocardium and valves are very poorly supplied with vessels, and Rokitansky, in his "Pathological Anatomy," only observed that inflammatory congestion is rarely seen in the acute period of endocarditis. Luschka was the first anatomist who made any definite statement in regard to the vascularity of the valves. In a paper contained in one of the early volumes of Virchow's *Archiv* he described the auriculo-ventricular valves as having a well-marked supply of vessels near their adherent border, and adds that he has counted from four to six descending branches in each valve which form an irregular large-meshed plexus extending towards the free border of the valve, whilst other branches anastomose with them which proceed from the musculi papillares, and accompany the chordæ tendineæ. Luschka makes no reference to the semilunar valves. Gerlach, in the second edition of his Histology, speaks of the slight vascularity of the auriculo-ventricular valves, and expressly states he has never been able to discover any in the semilunar valves. The same view seems to be held by Henle, Frey, Cruveilhier, Sappey, and others. MM. Ranvier and Malassez give the details of the numerous observations they have made, and the results at which they have arrived may thus be summed up. First, in health the semilunar valves of both the pulmonary and aortic orifices never contain vessels, nor are vessels present in the fibro-elastic portion of the auriculo-ventricular valves. The valves of the tricuspid and the mitral valve are usually entirely composed of fibro-elastic tissue. The right or posterior valve of the

initial valve has, however, at its upper part a fleshy vascular region which does not in general exceed one-sixth of the height of the valve. In the new-born child muscular fasciculi extend to a variable distance into the auriculo-ventricular valves, and are accompanied by vessels, but neither muscular tissue nor vessels reach the inferior fourth of the valve. In pathological conditions vessels may be found throughout the whole extent of the aortic semilunar and mitral valves, which appear to result from a neoplastic process following inflammation. They consider that the conditions which favour the development of the vessels under pathological conditions are at present insufficiently known, and MM. Ranvier and Malassez are further of opinion that the hæmatomata of the valves which occur so frequently in the new-born child do not stand in relation with the vessels existing at the moment of birth; their formation appears to be in relation with the process of retrogression of the vessels which exist in the valves during the fœtal period.

SMOKE ABATEMENT IN MANUFACTORIES.

MANY of us are too ready to abandon ourselves to the idea that there is but one really practicable means of escape from the inconvenience of city fogs—namely, the disuse of coal and the substitution of a smokeless illuminant. In the absence of any known substance at once as effectual for its purpose and as inexpensive, every other alternative suggestion is therefore worth recording. One such in particular is of recent interest. We refer to the proposal recently brought forward by the Manchester and Salford Noxious Vapours Abatement Association to test the value of existing appliances for smoke prevention. At a meeting held in Manchester Town Hall a few days ago, this action on the part of the Association was generally approved, and an executive committee appointed. It is satisfactory to learn that the balance of opinion at this meeting tended to show that, even in the case of manufactories, the emission of black smoke was avoidable, and that without material increase, if any, in the sum of working expenses. There is, indeed, little doubt that much of the smoke so liberally discharged over our large cities would, if it could be utilised, prove a useful means of combustion in various chemical processes, so that the proposed reform, if carried out, might even be profitable to its promoters. It is, at all events, a hopeful sign that a proposal of this kind should have emanated from a great manufacturing and commercial centre, and we sincerely hope that the purpose thus indicated may surely, if slowly, ripen to a satisfactory result.

THE ITALIAN SAUSAGE INDUSTRY.

THE excitement caused throughout Italy by the detection of extensive frauds in the Bologna sausage manufacture is spreading. Other cities, notably Florence, are demanding an immediate inspection of the same articles of food as are vended in Italian warehouses. The public, says the *Nazione* of that city, are entitled to some such inquiry in their behalf as has just yielded such startling results in Bologna. Instead of the pig's flesh popularly supposed to form the main ingredient in the Italian sausage, horseflesh is that which is really used—horseflesh, moreover, of more than dubious origin, taken from animals that have died of infectious disease, and even that in an advanced state of decomposition. According to the *Tribuna* there has been collusion between certain sausage manufacturing firms and the veterinary authority, the latter winking at frauds which it ought to have exposed. The new powers conferred by the Codice Sanitario, indeed, are finding material for their exercise in quarters hitherto above suspicion—in an industry, to wit, which has long been one of the special boasts of Italy.

RARE SURGICAL CASES.

THERE are at present in the wards of St. Thomas's Hospital, under the care of Mr. Croft, three cases of unusual interest to surgeons, which have been admitted during the last few days. On the 11th inst. a patient was admitted suffering from a wound from a revolver in the chest on the left side. He was much collapsed. The aperture of entry was about three inches below the nipple, and an inch and a half nearer the middle line, and the ball apparently traversed the lung and pleura. Hæmoptysis came on three hours after the injury; there was dulness over the left base posteriorly. At midnight there was vomiting, the vomited matter containing blood. Mr. Croft at 2 A.M. on the 12th, in consequence of the character of the vomiting and the presence of tenderness in the epigastrium, decided to explore the region of the stomach for a wound of that viscus. After a careful examination, as no injury to the diaphragm or abdominal contents was found, the wound was closed. The man is progressing satisfactorily. On the 13th his temperature was subfebrile; he was without pain, and there had been no vomiting for twenty-four hours. In the second case, the same surgeon removed the head of the humerus from the axilla into which it had been displaced after comminution of the upper end of the bone, with dislocation. The patient, a feeble man, about thirty years of age, had received the injury by falling through a trap-door. The accident occurred in the evening of the 8th inst., and was attended with much contusion of the nerves. In the third case Mr. Croft removed a piece of the articular cartilage of the femur from the knee-joint, which had been detached three days before by means of a violent twist of the knee. The joint was not struck by anything, neither did the patient strike his knee by falling. The patient was a boy of seventeen, without history of any previous trouble in the joint. The piece of detached cartilage, with a thin layer of bone covering the surface, measured one inch by five-eighths of an inch. We hope to be able, in a future number, to give these cases more in detail.

OYSTERS.

OYSTERS are so nutritious and of so much value in many forms of convalescence, as well as so largely employed as a luxury, that it is to be regretted they should have fallen under the ban of a scare. It is so easy, when the public mind is disquieted and alarmed by the prevalence of an epidemic, to fix the blame upon one special article of diet, and to be lulled into a false sense of peace provided that this substance is avoided; but, on the other hand, the connexion between the disease and the supposed peccant substance is very frequently imaginary. The relief obtained by branding some possibly innocent substance may occasionally serve to divert attention from some radical sanitary defect, while it also causes an irrational distaste for some article of diet which requires much time and experience to eradicate. Contamination with sewage is justly regarded as a danger, and one of the latest suggestions is that some epidemics of typhoid fever are to be traced to the use of oysters thus poisoned. It is an undoubted fact that sometimes attacks of diarrhœa follow the ingestion of oysters, but the comparative rarity of this leads many to brave this danger with an easy mind. The proof of the connexion between typhoid and oysters can only be established by careful inquiry. So many sanitary defects exist in Dublin that we should be sorry to find the stigma cast upon foreign oysters regarded as a satisfactory solution of the problem, still less as a reason for taking no measures to relieve that city from the frequent and powerful odours which at present pervade it. While it is possible that oysters may cause disease, it is certain that the other question urgently calls for attention and improvement.

THE DEATH OF MR. ERNEST WELLDON.

THE painful circumstances which surrounded the death and burial of Mr. Welldon furnish more than one lesson, which it behoves both the relatives and medical advisers of deceased persons to take to heart. Mr. Welldon was only twenty-nine years of age at the time of his death. It was alleged that there were facts open to more than one interpretation as to the cause and method of his death. Now, however, that a post-mortem examination and analysis have been made and an inquest held there seems no reason to doubt that death was the result of natural causes, as understood by the statute law. It was proved before the coroner that deceased had admitted having been addicted to intemperance since his fifteenth year, and, further, that the habit had grown as he became older. There was some discrepancy in the opinions of the medical men as to the proximate cause of death. Mr. Farr, who attended deceased, assigned it to uræmic convulsions, whilst Mr. Hebbert, who conducted the autopsy, thought it was due to cardiac failure either from delirium tremens or chronic alcoholism. The fact that Mr. Hebbert did not find advanced kidney disease must be taken in connexion with the circumstance that the examination was not made until some days after the death, when the renal epithelium would have undergone post-mortem changes not altogether easily distinguishable from the effects of disease. Chronic alcoholism spares but few tissues. It has a special proclivity to link itself with nervous, cardiac, and renal disorders, both functional and organic; and it may well have been that—temporarily at least—both directly as the result of excessive indulgence; and, indirectly as the consequence of cardiac weakness, the kidneys, so to speak, struck work, and so were responsible in great measure for the death. We feel compelled to subscribe to the delivery of the coroner when he deprecated the filling up the death certificate by one medical man and the signing it by another. Such a procedure is calculated, even by mischance, to lead to complications and difficulties. In the above case the Messrs. Farr acted in perfect good faith, but we doubt whether they exercised the greatest discretion in the matter of the death certificate.

THE PRESYSTOLIC MURMUR.

THE study of the rhthym of cardiac murmurs seems to possess some highly fascinating properties for physicians. It has certainly been productive of many an ingenious theory and more or less subtle speculation. The recent lecture by Dr. Dickinson published in these columns demonstrates that he at least abides by his previous contention as to the nature of the "so-called" presystolic murmur, which, when enunciated two years ago, led to so prolonged and exhausting a controversy. His argument is plausible, and is supported by statements of fact and inference which are stated so clearly and in so entertaining a manner as to divert the attention from any possible physiological inconsistencies they may involve. The matter lies in a nutshell. The peculiar character of the presystolic murmur with its abrupt termination is held by the "orthodox" to indicate the eddy of blood as it flows from the auricle to the ventricle, the bruit being completed by an intensified systolic sound; whilst it is believed by Dr. Dickinson and his adherents to be throughout due to a regurgitant flow into the auricle, and is therefore wholly systolic, the sharp sound indicating the end, and not the commencement, of systole. The question has been so much debated, and has, indeed, so often been put to the test of cardiographic experiment, that it seems hardly desirable to reopen it; indeed we cannot afford more space to a controversy upon a subject which is in one aspect merely an intellectual puzzle. At the same time it must be pointed out that Dr. Dickinson has laid undue stress upon the coincidence of the carotid pulse with the abrupt sound that terminates the presystolic murmur, for the time between the ventricular systole and that pulse is almost inappreciable; so that, on the regurgitant hypothesis of the bruit, the pulse should be felt much earlier in the latter's course. After all, whether the bruit be regurgitant or direct, there is, at any rate, unanimity upon one point—viz., that it is indicative of mitral stenosis; and, for our part, we can see no valid objection to renaming the bruit as Dr. Dickinson originally suggested, so that its name might not convey any preconceived opinion as to its mode of production. The only objection to this proposal is the general one of the difficulties which are encountered in any attempt at revision of clinical nomenclature.

THE NEW REGULATIONS FOR THE DENTAL DIPLOMA.

WE are glad to be able to chronicle a great advance in the curriculum required by the College of Surgeons of England for their dental licentiates. At the meeting of the Council on Thursday such alterations were effected as to make the requirements for the first and second professional examinations for the conjoint diploma and those for the L.D.S. practically identical, and it is sincerely to be wished that the dentists will readily take advantage of the opportunity held out to them of acquiring the M.R.C.S., L.R.C.P., and L.D.S., thus bringing our esteemed colleagues, the dental surgeons, into a closer bond of union with the rest of the medical profession. We publish on another page the new regulations, by which it will be noticed that the subjects to be taken at the general hospital are identical with those required for the first two professional examinations for the conjoint diploma, save only that practical pharmacy is omitted. Moreover, it is now possible for the dental student to take chemistry, materia medica, and the three years' mechanical work before registration as a dental student. The courses in anatomy, physiology, practical physiology, and dissections are the same for both diplomas, and all students alike are required to attend the class examinations. These changes must of necessity raise the status of the dental profession in the eyes of their medical *confrères*, and tend greatly to remove the stigma that too often is attached to the dental students at our hospitals; while the rest of the medical profession will be pleased to welcome gentlemen who practise the science of dental surgery, since their professional education is so similar, as worthy and honourable members of a learned profession.

"PIOUS FOOLS."

THERE is a wise saying attributed to the late Dr. Chalmers, that no people do so much harm in the world as pious fools. One of the greatest proofs of the truth of Christianity is its persistent survival in spite of all the stupid things that are said and done by those who profess it. Faith-healing is only one of the many illustrations of our remark. To take a poor consumptive girl away from doctors to "Bethshan" and then to Worthing, and then expose her by a drive till she got pneumonia superadded to phthisis, and died, was eminently worthy of the class of persons contemplated by Dr. Chalmers. It is no excuse for this conduct that the patient herself believed in it; neither is it improved by the fact that when death threatened they sent for a doctor to fill up a certificate and avert a coroner's inquest. The use of doctors is not to certify the cause of death, but to save life. Dr. Gostling gave his evidence with much clearness, and showed that the deceased's death was caused, prematurely at least, by exposure and by want of medical direction.

The coroner summed up with much strength and moderation, and the jury very properly added a censure to those in charge of the patient for not sending for a doctor in time. We wish we could believe that people who so discredit Christianity would act more wisely. We can only appeal from them to Him they so poorly represent, whose teaching was that they that are sick need a physician.

TESTING THE QUALITY OF GASTRIC SECRETION.

DR. ALFRED GÜNZBURG of Frankfort publishes in the *Deutsche Medicinische Wochenschrift* a paper on the diagnosis of the contents of the stomach by means of a less disagreeable mode of procedure than the use of the stomach-pump. He recommends that the patient should swallow substances which are easily found in sputum and urine, so that from the examination of these secretions an inference as to what is occurring in the digestive tract may be drawn. It is only necessary, says the author, to encase such a substance in an envelope which can be digested by the juice of the stomach. He chooses iodide of potassium for his experiments, because minute quantities of iodine may be discovered in the sputum, and this can be easily examined every five minutes. The plan he adopts is as follows:—Into short well-vulcanised gutta-percha tubes with very thin walls are inserted tablets of from three to five grains of iodide of potassium with a little gum, one into each, their ends being then twisted so as completely to close them; they are then all tied in precisely the same manner by three simple fibres of fibrine which have been preserved in alcohol. The little sealed tubes are preserved in glycerine, dried before use, and put into a gelatine capsule. The patient swallows one of these capsules an hour after Ewald's "experimental breakfast," and expectorates every quarter of an hour into a test glass in which iodide of potassium is searched for by testing with starch. The gelatine capsule is in all cases equally quickly dissolved in the stomach; but the rapidity with which the tube bursts from the swelling of the fibrine ligatures depends upon the quantity of hydrochloric acid in the gastric juice; the iodide of potassium tablet is then very soon dissolved. The author admits that the tubes may not open at all in the stomach, but only in the gut, for one may occasionally pass through the pylorus untouched, together with the chyme. It is therefore necessary to repeat the experiment several times, but this cannot be done immediately, as iodide is usually excreted continuously for more than twenty-four hours. The ten healthy people on whom Dr. Günzburg experimented excreted the first iodide of potassium on an average one hour and a quarter after swallowing the capsule, the absorption, which is always pretty uniform, taking ten minutes, the difference—i.e., sixty-five minutes—being the average time taken by the ligatures to swell sufficiently to burst the tube.

THE EFFECTS OF BAD FISH.

AMONG the most curious problems of medicine must be reckoned the strange diversity of results which follow the ingestion of various articles of diet. Frequently shellfish are accredited with having produced serious symptoms, and numerous theories of explanation have been proposed, the one which is now currently accepted being that a poisonous principle is formed which has been isolated by Brieger and termed "mytilotoxine." This substance, however, is said to act like curara in paralysing motor nerves, and must be considered as distinct from the material which so often gives rise to gastritis and enteritis. In an inquest recently held by Dr. G. Danford Thomas evidence was given of the ingestion of fried plaice, and the symptoms appear to have followed this so closely as to leave little room for doubting a causal connexion. On the other hand, it would seem that others who partook of the same meal were not affected. The whole question bristles with difficulties, and has hardly received the attention it merits in this country. The existence of ptomaines possessed of poisonous properties has long been assumed, and in many cases demonstrated, but the conditions under which they are produced, and their effects upon the human being, have scarcely been satisfactorily formulated. In the subject of the inquest above referred to some special circumstances must have been in operation, rendering the deceased more prone to toxic agencies. Special immunity from the effects of a poison cannot be taken to disprove its existence, for it is a matter of common experience that a certain proportion of those exposed to infectious fevers escape.

A MUNIFICENT GIFT.

AT the usual weekly meeting of the London County Council, held on Tuesday, the 12th inst., the Chairman, Lord Rosebery, read a letter from Sir Sydney Waterlow, Bart., offering as a free gift an estate of nearly twenty-nine acres in extent, situated on the southern slope of Highgate-hill, in the parish of St. Pancras, for the purpose of being laid out as a public park for the north of London. The grounds are described as "undulating, well timbered with oak, old cedars of Lebanon, and many other well-grown trees and shrubs. There is also an acre and a half of ornamental water supplied from natural springs." This splendid contribution to the "lungs" of London is accompanied by a donation of £6000, to be expended in connexion with the park in such manner as the Council may deem most desirable. It need hardly be said that the Council decided by acclamation that Sir Sydney Waterlow should be heartily thanked for his gift, and that the letter should be engrossed on the minutes. This noble present comes as a fitting crown to the great services already rendered to the inhabitants of London by Sir Sydney Waterlow. His energy in promoting the cause of the Hospital Sunday Fund movement—and we are well aware to what a degree the success of that movement is due to his efforts—and the philanthropic and practical interest he has always displayed in the welfare of the working-classes will long cause his memory to remain green. When the time comes (and may it be far distant) to write Sir Sydney Waterlow's epitaph, the simple and appropriate legend might run: "He did good with both hands."

CHLOROFORM AND LOCOMOTOR ATAXY.

DR. THIEM, having had to give a patient with slight signs of locomotor ataxy chloroform for the purpose of examining an abdominal tumour, was surprised to notice that as she was being helped from the room, while still somewhat under the influence of the chloroform, she walked with a typical ataxic gait, though this symptom was not ordinarily present. On watching other patients who were not suffering from this affection trying to walk while still partially under the influence of chloroform, Dr. Thiem convinced himself that the peculiar gait only occurred in the subjects of ataxia in whom the semi-narcotic state brings out the want of coördination in the movements of the legs. The explanation would appear to be that inasmuch as the peculiar gait is not due to any paralysis of the muscles, but only to the want of coördinating power, which is set in action by the control exerted by the muscular sense and the sense of sight, when, as in the case of a half-chloroformed subject of locomotor ataxy, both the central coördinating apparatus and the peripheral regulating machinery are in a more or less inactive condition, there is a double reason for the existence of the well-known jerking and sliding move-

ments of these patients. It would appear, then, that in doubtful cases of locomotor ataxy some assistance towards a correct diagnosis might sometimes be obtained by partially anæsthetising the patient and then observing his gait as he walks across the room.

ASSISTANCE FOR POOR INVALID AND CRIPPLED CHILDREN.

AMONG the many societies which from time to time have entered their claim to public support, few, if any, are more truly charitable or more useful to the persons they benefit than the Invalid Children's Aid Association. In the words of its first report, just issued by the Society, its purpose is briefly stated to be that of finding a friend for any and every poor and invalid or crippled child in London. Its work is done by an executive committee represented by visitors, each of whom has the supervision of two or more children, the total number of the latter now on the books being about 600. The friendship exhibited by the Society towards its youthful charges is eminently practical. It steps in to fill a gap which neither hospitals nor dispensaries can efficiently stop. It seeks out the chronic halt and maimed of needy childhood, and discharges towards them with equal care, and perhaps with even more intimate sympathy, the brotherly kindness of the good Samaritan. It provides, as occasion requires and its means allow, visitation, trained nursing, medical advice, comforts, food, clothing, dressings and surgical appliances, the loan of spinal and other carriages, hospital or seaside accommodation, and, if needful, money, for the relief of the suffering children. Such a work hardly needs to be commended. It is its own best advocate, but we have thus briefly touched upon its characteristics in the hope that something may thus be done to direct the speedy and substantial aid of willing givers everywhere towards the present office of the Association, at 18, Buckingham-street, Strand, W.C., and to promote the formation of similar institutions in other cities.

MODE OF ELECTION OF MEDICAL STAFFS TO HOSPITALS.

THE evils of canvassing the governors of a medical charity by candidates for medical appointments are so patent, and the ordeal to the candidate himself is so trying and distasteful, that nothing can be said in support of the system, which we are glad to see is being generally abolished. This step in the right direction was taken at a special court of governors of the Royal Berks Hospital on the 5th inst., when it was resolved that, when a vacancy was notified to the board, it should be advertised in the local newspapers and medical journals; and that the election should take place at a special meeting of the Board of Management, in conjunction with the medical staff and twelve other governors, such meeting to be held within thirty days and not less than twenty days from the date of the advertisement. "All canvassing on the part of a candidate will disqualify him" is one of the most important clauses of the resolution.

TYPHOID FEVER.

FROM experiments made with cultures from the bacillus typhosus (Eberth) in beef peptonoids and in peptonised milk, Dr. Rachford of Ohio (*Medical News*, Oct. 26th) infers that the nerve symptoms and fever present in the inoculated disease depend in great measure on the ptomaines produced, and that these ptomaines vary with the food material in which the bacillus is grown. Thus in rabbits inoculated with bacilli cultures in broth and beef peptonoids showed stupor and high fever; but when the culture was in peptonised beef and brain, the rabbits showed stupor but subnormal temperature; whilst the effect of inoculation of milk cultures was to cause neither fever nor nervous symptoms. The intestinal lesions, it may be remarked, were similar to those of typhoid fever. The inference is that milk is the best diet in the disease—a conclusion long ago arrived at by practical physicians.

THE LIVERPOOL ROYAL INFIRMARY.

A SPECIAL GENERAL MEETING of the trustees of the Liverpool Royal Infirmary was held on the 11th instant for the purpose of electing a surgeon in place of Mr. Reginald Harrison. The chairman of the committee (Mr. H. B. Gilmour) paid a graceful tribute to that gentleman, whose connexion with the infirmary dates from 1860, and has been continuous since 1868. Mr. Harrison commenced as senior house surgeon and ended as senior surgeon. The committee thus looked upon him as specially their own, and one of whom they had come to be very proud. His resignation was a matter of very general and sincere regret, and he took with him the confidence and heartiest good wishes of all who knew him. Mr. Frank Thomas Paul, F.R.C.S. Eng., was elected to the vacancy without opposition. Mr. Paul was formerly resident medical officer to the infirmary, and for some years past he has been honorary surgeon to the Royal Southern Hospital.

MODIFICATIONS IN REGULATIONS OF THE CONJOINT BOARD.

ON the recommendation of the Committee of Management, the College of Physicians adopted the addition of wards to the regulations relating to the discharge of duties of medical clinical clerk and of surgical dresser, to the effect that these duties should in each case be discharged in the wards during not less than three months, so that the amended regulation now runs: "9. Of having discharged, after having passed the second examination, the duties of a medical clinical clerk during six months, and of a surgical dresser during other six months, of which, in each case, not less than three months shall have been in the wards." It was also resolved to require a certificate of three months' further instruction in diseases peculiar to women, as well as in midwifery, from those candidates who fail to pass that part of the third or final examination.

THE MEDICAL DEFENCE UNION.

THE Medical Defence Union have done well to establish a Metropolitan Branch, with local officers, in or near London, with Dr. Bridgewater of Harrow as President; Dr. Bantock, Treasurer; and Dr. Campbell Pope as Secretary. This step was taken at a meeting in London on Nov. 8th, presided over by Mr. Lawson Tait, who described the success of the Union in several instances of vexatious prosecution and in suppressing illegal practice. The success of the Union has been shown in several cases in the best of all ways—viz., by arresting vexatious litigation in its early stages by merely showing that there were the means and the organisation for a determined resistance.

HONOURS FOR ARMY SURGEONS.

THE following appointments to be Companions of the Distinguished Service Order have been gazetted: Surgeon-Major Aylmer Ellis Hayes, Army Medical Staff (employed with the Egyptian Army), L.R.C.P. Edin., M.R.C.S. Eng., "in recognition of his services during the recent action at Toski, on the Nile"; and Surgeon Ignatius Purcell Doyle, Indian Medical Service, Madras, L.K.Q.C.P. Irel., L.R.C.S.I., "in recognition of his services during the late operations in Burmah."

THE HYDERABAD CHLOROFORM COMMISSION.

WE learn by telegram from Dr. Lauder Brunton, who, as our readers are aware, proceeded to Hyderabad on Oct. 4th on behalf of THE LANCET, and in consequence of an invitation extended to us by the Nizam, for the purpose of repeating and amplifying the experiments made by the Hyderabad Chloroform Commission in 1888, with a view to confirm or correct its conclusions, that the work is progressing in an entirely satisfactory manner, and the facilities placed at Dr. Brunton's command are unrivalled; 275 experiments on dogs and monkeys have already been completed, and the result so far has been to practically confirm the conclusions arrived at last year by the Hyderabad Commission. The telegram adds that the Nizam's Government is acting in a most liberal manner, and, in conclusion, states that the Nizam and the British Resident paid a visit to the laboratory on Monday last and inspected the work.

UNIVERSITY OF CAMBRIDGE.

THE financial board of the University of Cambridge have had under their consideration an offer made by Dr. Sidgwick to give £1000 now and £500 more within the next two years as a contribution to the expense of the proposed new buildings for the Department of Physiology, the buildings to be commenced without delay. The whole cost is estimated at about £5000, and the financial board recommend to the Senate of Cambridge University that Dr. Sidgwick's offer be accepted with thanks; that, in addition to Dr. Sidgwick's donation, the sum of £2500 be appropriated from the General University Building Fund, and a sum not exceeding £1000 from the Chest, to defray the cost of the buildings, and that the work be commenced at once.

GROUND WATER AND ITS INFLUENCES.

THE influence of ground water and shallow wells in relation to public health is the subject of a somewhat exhaustive paper just published by Dr. W. B. Featherstone. The matter is dealt with from many points of view, including its geological, its chemical, and its health aspects, and on each point the information which has been compiled by other investigators, whether foreign or English, is given at some length. The number of diseases which, in one or other way, are stated to be associated with defects in, and with impurity of, ground water, and of shallow well water, is a very considerable one; and the work hardly measures sufficiently the degree to which the various diseases may be allied to ground water, in so far as production or spread are concerned. But students of the subject would do well to read the work, which summarises in a useful form the principal facts which are known or alleged to bear upon the subject.

DEATH OF MR. HAYNES WALTON.

WE regret to have to record the death, at the age of seventy-three, of Mr. Haynes Walton, F.R.C.S. Eng. The deceased was formerly House Surgeon at St. Bartholomew's Hospital and lately Surgeon and Surgeon in charge of the Ophthalmic Department at St. Mary's Hospital, besides holding several other appointments. We hope in our next number to give a more extended notice of the deceased.

FOREIGN UNIVERSITY INTELLIGENCE.

Christiania.—Dr. S. Terup has been appointed to the chair of Physiology, in succession to the late Professor Worm-Müller.

Dorpat.—Dr. Werner Zoege von Manteuffel has been appointed to a lectureship in Surgery.

Geneva.—Dr. Vincent has been appointed to the chair of Hygiene in place of Dr. Dunnant.

Heidelberg.—It is proposed to establish a Hygienic Institute, under the direction of Professor Knauff.

Liège.—Dr. Ch. Frike has been promoted to be Professor of Bacteriology.

Valencia.—Dr. Don Nicolás Ferrer Julve, Professor of Surgical Anatomy and Operative Surgery, has been appointed Dean of the Medical Faculty.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

The deaths are announced of Dr. Bonnemaison, Professor of Clinical Medicine in the Medical School of Toulouse, and of Dr. La Loggia, Senator of Italy.

THE munificent legacy of £100,000 has been bequeathed to St. Andrews University under the deed of the late Mr. David Berry, one of the oldest and wealthiest Australian colonists, who died last September. Mr. Berry came into the Australian estates of the late Dr. Alexander Berry, an old student of St. Andrews University, who died in 1873. It was understood at the time that Dr. Berry had left an unsigned will bequeathing a quarter of a million sterling to his *alma mater*, but had left it to his brother David to carry out the provisions as he thought proper. St. Andrews University will not participate in the bequest until 1894.

PROF. A. EULENBERG celebrated on the 11th inst. the twenty-fifth anniversary of the commencement of his academic career, his first appointment being as assistant physician to the University Hospital at Greifswald, when Ruhle was the dean. Prof. Eulenberg is best known for his contributions to neurology, his first writing on the subject being his prize essay (1862) on Cerebral Hæmorrhage. His text-book of Nervous Diseases is well known, and so is the Real-Encyclopædie der Gesammten Heilkunde, which he edited, and of which the second edition is now appearing.

THE *London Gazette* states that the Queen has been pleased to give directions for the appointment of Edward William Rawle Branch, Esq., a medical officer in the Leeward Islands, to be an official member of the Legislative Council of the Virgin Islands.

M. DU CHAILLU was present at the meeting of the Edinburgh Graduates' Club on Wednesday evening, presided over by Sir James Crichton Browne. The eminent traveller received a hearty welcome in connexion with the toast of his health, proposed by Dr. George Harley.

ACCORDING to a St. Petersburg medical journal there has arisen in the province of Viatka a serious outbreak of ergotism or raphania. No less than 683 persons have been attacked, of whom 34 have died.

DR. FRANCIS WARNER has been appointed Lecturer on Materia Medica and Therapeutics at the London Hospital Medical College.

DR. J. MACKENZIE has been appointed Italian Vice-Consul at Kimberley.

TUBERCULOSIS.—The prizes offered by the Belgian Academy of Medicine for the best essays on the public and private hygienic methods for preventing the development and propagation of tuberculosis in Belgium have been awarded to two Brussels practitioners—Drs. Destrée and Gallemaerts.

Pharmacology and Therapeutics.

SALINE HYPODERMIC INJECTIONS IN POST-PARTUM HÆMORRHAGE.

In the Dresden Lying-in Hospital the plan of introducing a large quantity of a solution of common salt under the skin has been very successfully employed in several severe cases of post-partum hæmorrhage. The solution is of the strength of 0·6 per cent., and the quantity injected is a litre, or a little under a quart. The spots selected for the injection are the infra-clavicular and the inter-scapular regions. During the progress of the operation the swelling produced under the skin must be manipulated by a sort of shampooing movement so as to disperse the liquid as much as possible. The water with which the solution is made must be sterilised or well boiled. The advantages of the plan are that it can be easily carried out by any medical man, as it is far less difficult than transfusion, besides which it is not so dangerous. Dr. Münchmeyer considers the plan so suitable for private midwifery practice that he suggests that a little apparatus, which is made on purpose for it, should always be carried in the obstetric bag, together with the proper quantity of common salt. Boiled water can always be procured, and this, when cooled down to the temperature of the body, 98·6° F., will do very well, though in hospital clinic he employs a more strictly sterilised solution.

ANTIFEBRIN IN EPILEPSY.

Dr. Theodore Diller of Danville has been using antifebrin in the treatment of epilepsy in nine cases in which bromides and other modes of treatment had previously been employed. He finds that in all the cases in which the drug was given continuously there was noted a reduction in the number of fits ranging from about 25 to 75 per cent., as compared with other months during which the patients were on bromide and tonic treatment alternately. The remedy was in all cases well borne, producing no apparent mental or physical depression, this forming a marked contrast to the depressant effects noted after a course of bromides. No skin eruption was produced. In spite of these results, however, he believes that in any given case, in which a great number of fits are occurring, and where it is desirable to control them as soon as possible, bromides would be of far more value than antifebrin. From the table appended to his paper it would appear that the beneficial effects of antifebrin were most marked only after the drug had been employed for over three months. In two cases no improvement followed the use of antifebrin.

EFFECT OF ALCOHOL ON THE SECRETION OF BILE.

Dr. Cheltsoff publishes in the *Ejenedélnaya Klinicheskaya Gazeta* an account of some experimental observations on dogs undertaken with a view of determining the nature and amount of the influence of alcohol upon the secretion of bile. He made biliary fistulæ in the animals, and after all the disturbance caused by the operation had passed off he proceeded to observe the effect of introducing alcohol in various quantities into the stomach. The bile as it was secreted was collected in glass receivers, which were changed every few minutes, the contents being measured, weighed, and otherwise examined. The results showed that small quantities of alcohol either have no perceptible effect on the bile or serve to increase it slightly. Large doses, on the other hand, perceptibly diminish the flow, though sometimes there is at first a temporary increase. Medium doses do not give any constant result. Dr. Cheltsoff has come to the conclusion that the alcohol acts directly on the hepatic cells.

SOMNAL.

A new hypnotic, which has been named somnal, is described in a Berlin pharmaceutical journal by Herr Radlauer, who states that, chemically speaking, it is ethylated chloral-urethan, its formula being $C_7H_{12}Cl_3O_3N$. It has a melting point of 42° C., and boils *in vacuo* at 145° C. It is not acted upon by nitrate of silver or by acids, and can be prescribed in half-drachm doses, dissolved in water with a little syrup of some kind. As a rule, a dose such as this acts in about half an hour, and produces six or eight hours' sleep. No unpleasant after-effects have been observed. There appears to be no interference with the digestive, circulatory, or respiratory organs, so that, according to the writer, the new drug has all the advantages of chloral without any of its disadvantages.

NAPHTHALIN AND CATARACT.

Dr. Kolinski, writing in Von Graefe's *Archiv*, Band xxxv., 2, points out that naphthalin, which is coming a good deal into use from the powerful effect it seems to have on the micro-organisms existing in the intestines in some cases of diarrhœa, possesses also the property of producing changes in the nutritive power of the blood, thus being liable to set up degeneration of the bloodvessels. As the eye is one of the most highly vascular organs it is one of the first to show any of the changes induced by interference with the nutritive property of the blood. Naphthalin is said first to cause small extravasations in the choroid and in the ciliary body, then ecchymoses and white patches in the retina, and finally cloudiness in the lens and crystals in the vitreous.

THE SMOKE OF HYOSCYAMUS NIGER IN TOOTHACHE.

A Russian practitioner recommends the use of hyoscyamus seeds for toothache. His plan is to burn the seeds and to convey the smoke through a little paper tube to the hole in the tooth. He declares that in nearly all cases one application, or at most two, will suffice to cure the toothache.

FISH FRAUDS.

By J. LAWRENCE-HAMILTON, M.R.C.S.

No. VII.

KNOWINGLY and intentionally to sell or offer for sale, or cause to be sold in markets, shops, hotels, eating-houses, or by street hawking, inferior or cheaper kinds of fish, whether fresh, cured, tinned, salted, bottled, potted, or otherwise, as and for superior kinds of fish, as well as loading shellfish with bits of fish, being a fraud upon and at the expense of the consumer, should be made by statute a punishable offence. The adulteration or treatment of salted, cured, tinned, potted, bottled, or preserved fish, by unwholesome ingredients, and by avoidable filth, should also be made a punishable offence. By chemical analytical experts, aided by fish naturalists, a Government report on the condition of these preserved fish and fish products would yield startling revelations. By 12th Anne, chap. 2 (1713), it was enacted that all foul salt should be thrown overboard and destroyed, to prevent its use in curing fish. In 1884 some French soldiers in Algiers suffered from poisoning after eating salted red cod, due to a parasite attributed to the foul salt derived from marshes near Copenhagen. The bacteria appear to have been the *Clathrocystis rosea Persicana* of Cohn, *Sarcina morrhuæ*, or *Sarcina littoralis*, according to different observers. Such red salted cod is accused of infecting curing-houses, fishing-vessels, warehouses, and wharves. This red salted cod must not be confused with the so-called red codfish, especially good eating, whose colouration is attributed to its excessive feeding on shellfish and starfish. Recently, at Baltimore, owing to a sardine tin being improperly soldered with lead on the *inside*, a child within twenty-four hours of having partaken of some of its contents died, and two other persons were made ill with lead poisoning. The public, including its medical officers of health and fish inspectors, would do well to recollect the following fish-trade tricks and frauds. Occasionally, stale codfish have their gills smeared with fresh bullock's blood, as if recently captured. On the fish vendors' slab cod and other fish are sometimes, by means of a blowpipe, inflated with air or *blown*, so as to make skinny, flabby fish look plump and fat. Small haddocks and rock pouters—cheap, common fish—are often skinned, their tails inserted into their mouths, and sold at a high price for whiting. Painting and varnishing the gills and other parts of stale fish, and even artificially colouring cured fish to make them look fresh, are practised at home and abroad. By a statute of Henry VII. in 1499 no fish was allowed to be coloured and offered for sale. "Filleted soles" are often dressed weavers (stinging fish) or plaice. Halibut and brill are passed off as turbot. "Turtle" soup is often manufactured from conger eel, and

not turtle. On capture, red mullet have their scales removed to intensify their redness. Stale eels and skate are rubbed over with sand to make them look as if recently caught, and also to increase their weight. In France skinned dog-fish are sold as "Dutch" eels. Sprats are often canned and labeled sardines or anchovies, and form the basis of "anchovy paste." "Dressed" juvenile split herrings in America are passed off as anchovies, and small herrings sold for sardines. The so-called "Russian sardines" are small herrings flavoured with spices, largely exported from Germany. Covered with a special varnish of a smoky taste, herrings so doctored have been sold as "*smoked* herrings." Into lobsters and crabs which have become by reason of age of lighter weight are introduced portions of fresh haddock or roker—in the case of the lobster at the juncture of the tail (abdomen), and in the case of the crab by inserting through a side opening the fragments beneath its upper shell. This is technically called "loading." Broken lobsters are pegged with wood to unite the body and tail together, in which operation the two parts may be from two individual lobsters. Lobsters and crabs unfit for human food are "*freshened up*" by reboiling, thus partly concealing the odour of commencing decomposition. Lobsters killed in boiling salted water (one pound of salt to the gallon) have firm flesh, as found by bending their so-called tail; but if dead and stale prior to boiling, owing to muscular decomposition, the flesh is soft and flabby, and upon slight pressure the tail easily and readily bends or waggles.

Caviares made from the roes of the sturgeon, cod, mullet, &c., are often adulterated with rancid or decomposed caviare, with roes taken from inferior coarse fish, and with avoidable filth. Often canned and cured fish, besides being more or less decomposed, is put up or submitted to the curing process without being washed. Sardines are frequently carelessly canned in inferior oils instead of in pure olive oil. Canned "oysters" are often mussels with their byssus or moorings removed. "Plumping" oysters consists in placing them in shallow vessels, with an inch or so of fresh water, to which salt or oatmeal is added. This method, whilst it increases the size, whiteness, and firmness of the oysters, deprives them of their natural healthy delicate flavour. Being thus kept confined in vessels supersaturated with their own waste products, the oysters soon sicken and die. The fish thus deteriorated by fraud are chiefly sold to the poor, whose fresh food supplies are always dear, and too frequently unwholesome and unpalatable, acting as one of the overlooked factors which drive many of them to chronic intemperance.

Bad cooking and waste of food.—Compared with foreigners abroad, the British workman, as regards fresh food, gets the minimum value for his money. Foreign rivals, with less wages, live better and produce cheaper goods, and thus outbid English manufacturers. The wasteful extravagance and bad cooking of the average Englishwoman are a national calamity and a financial loss. Foreigners could actually live well upon the unused kitchen products thrown away by many English families. Accepting lower wages than the English workmen, the foreign workmen in England obtain more of the real comforts of life, because they and their foreign wives know better how to economise their food and deal generally with household matters.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE annual meeting of the Fellows and Members of the Royal College of Surgeons was held on Thursday, Nov. 7th, Mr. Jonathan Hutchinson, President, in the chair. There was a large attendance.

The PRESIDENT, in submitting the Report of the Council, said he desired to pass in rapid review some of the most important topics with which it dealt. The number of candidates for the diploma continued to increase, and the association of the College of Physicians with them for the purpose of giving a combined and more complete examination and a joint licence continued to work exceedingly well. With regard to their own higher diploma of Fellow, it was with great satisfaction that he noted a very definite advance in the number of those who sought it. The average number of candidates at the final examination for the Fellowship from 1879 to 1883 was thirty-seven, while from 1884 to 1887 it was sixty-four. Those who had taken the trouble to look into the tables would be struck with the great reduction in the number of those who presented themselves for the final as compared with those who appeared for the earlier examinations. At each stage the number diminished, and when the final was reached it was found that somewhat less than three-fifths succeeded. These facts might be held to indicate that on the whole the curriculum of study laid down for the successive examinations required worked well, and that at the earlier stages many were eliminated who were not qualified for professional pursuits. They might, he thought, also be held to show that those to whom the College entrusted the most important duty of protecting the profession against the entrance of imperfectly educated men had performed that duty with care and success. It was impossible to say of a College which rejected at the final examination for its diploma more than two-thirds of the already much reduced number of aspirants that it gave its credentials too easily, or that it in any way permitted motives of self-interest to influence its conduct. A challenge from the other side, a complaint of too great strictness, was not likely to be made excepting from one of two quarters, the public or the candidates themselves. There was no loud complaint from the public as to any defect in the supply of medical advisers, and, whilst he sympathised with the natural feelings of candidates or their relatives, he knew well that the real interests of the public and the profession were served best by keeping the standard high. It might then be taken for granted that the present standard was not too high, either for the wants of the public or the dignity of the profession. If the means taken to ascertain the relative merits of candidates were just and adequate, and the right men were always taken and the unsuitable ones always left, they could scarcely have too high a standard. During the past year much attention had been given to the details of the examinations, with a view to possible improvements, especially with reference to the question of the practicability of making the performance of operations on the dead body a necessary part of the examination for membership. In the Conjoint Board, when inquiring into the causes of the heavy rejections in anatomy and physiology, the belief was arrived at that it was not wise any longer to permit students to come up for those two subjects separately. The College Council enjoyed the advantage of having at its meetings more than half of the Court of Examiners, as well as a few of those constituting the several boards. The opinions and experience of those gentlemen on all details were thus always at their service. The Joint Committee of Management, on which no examiners had seats, had had special conferences with the examiners, with a view to ascertain whether there was any desire for alteration in the mode of conducting the examinations. It was satisfactory to find that those conferences did not lead to any important proposals for change. A similar result attended the appointment of inspectors by the General Medical Council. The Committee of Management were able to thank the Medical Council for a copy of their report, and to advise the College that the report did not call for any comment from them. It was, in fact, in the main commendatory of the examinations as at present conducted. The College, as would be seen from the report, had declined to transfer to the Medical Council the guardianship of its honour in reference to the conduct of its members, and he had no doubt that that decision would meet with the approval of the meeting. Amongst the instances of professional misconduct which had been brought under their notice during the past year, in only two, he was glad to say, had the offences seemed to the Council grave enough to require the extreme penalty of the withdrawal of the diploma. In each of those instances the proceedings were deliberate and careful, and the fact of the removal of the name was communicated to the Registrar of the General Medical Council, and led to its being struck off their Register. He felt assured that they need not allow their pleasure at the fewness of those cases to be in any degree dashed by the suspicion that the Council had either been negligent as to its vigilance or restricted in its powers. It had neglected no case brought under its notice, and in each had found its powers adequate to what the occasion seemed to demand. The College had had in hand, during several years, the extension of its

premises for the threefold purpose of its library, its museum, and the promotion of experimental research. The past year had witnessed considerable activity in all directions. The library in its improved condition had been in full use. An experiment was being tried for three months as to whether the library should be opened in the evenings or not. The first of the two museums for which plans had been prepared was now so far advanced as to be ready for its fittings, and it was expected that within a few months it would receive its contents. The other and much larger room was not yet begun, but the plans were in hand, and the buildings which occupied its site were in rapid process of removal. Among the objects to be speedily realised increased accommodation for casts, models, and drawings would, he trusted, be one; and another would be the better display of the series of beautiful dissections which had been recently accumulated, and which now encumbered the cases in the larger museum. In addition to these two special objects, they might feel sure that all departments of the collection would share in the advantages of the increased space, and that the utility of the Hunterian museum would be vastly developed. To those who, with himself, believed that if there were a royal road to knowledge in such subjects as natural history, anatomy, and pathology, it lay through the galleries of a well-arranged, well-catalogued, and well-labeled museum, the prospect of larger accommodation for the museum afforded unmixed pleasure; nor would he conceal his own strong hope that in the future the objects specified in the original resolution under which they commenced to build would not be forgotten, but that they would endeavour to achieve in the collection a museum which should illustrate diseases in the living subject on even a wider basis than that which was now the pride of the Hôpital St. Louis in Paris. During the year a large, well-fitted photograph room had been opened in the College premises, and a well-qualified gentleman had been appointed to take at any time records of disease in the living subject; and if any practitioner were inclined to send to the College a rare instance of a living subject worthy of photographing, they were prepared, under certain restrictions, to undertake its illustration. The College was engaged, jointly with the College of Physicians, in the erection of some large premises on the Embankment behind the Examination Hall. They would comprise a double series of workrooms and a commodious lecture theatre. They would be opened as a school of advanced research in subjects connected with medicine and surgery. The various courses of lectures had during the past year been given as usual, but with more than usual success. They had resulted in the permanent addition to surgical literature of several volumes which would make their mark, by Sir Spencer Wells, Mr. Berkeley Hill, Mr. Howard Marsh, Mr. Mayo Collier, Mr. Bland Sutton, Dr. William Hunter, Mr. Ballance, Mr. Priestley Smith, and the museum conservator, Prof. Stewart. It was the duty of the President each year to choose a Bradshawe lecturer, and he had this year chosen the senior Vice-President, Mr. Bryant. The lecture would be given on Dec. 5th. He had the pleasure to announce that under the appointment of the Council the Morton Lecture on Cancer and Cancerous Diseases would be delivered on Nov. 18th by the President of the General Medical Council and past President of the College, one to whom they had been under obligations for many years, Mr. Marshall. The new bye-laws having been approved by the Secretary of State had come into action in the summer. The principal change introduced by them was the permission to vote by proxy paper at the election of the Council. The last election was conducted under that rule, and the result was that 600 Fellows recorded their votes, whereas the average of the preceding years under the rule requiring personal attendance had only been 270. In June last an important memorandum in reference to the proposed amendment of the Lunacy Acts was drawn up by the President at the request of the Council, and forwarded to the Secretary of State for the Home Department. By the benevolent action of the proprietors of THE LANCET a fund had been constituted for the relief of the necessitous members of the profession, and a request was forwarded to the President that he would act as one of its almoners. With the approbation of the Council, Mr. Savory accepted for himself and his successors in office that responsible but very agreeable duty. The willingness of the Council to co-operate, whenever thought suitable, in works of philanthropy was also displayed in the appointment of Sir James Paget as one of the almoners of the Father Damien Fund for the relief of lepers, and of two other members of the Council to act in co-operation with others in a standing committee for the investigation of that disease. The Council on June 13th last was one which was to be ever regretfully remembered in the College annals. In it Sir James Paget sat officially among them for the last time. It was not too much to assert that no one in the past had ever excelled Sir James Paget in devotion to the interests of the College in all its various departments of work. No one could approach him in the amount of time which had been freely given, and none could rival him in the ability with which that time had been used. It was a deep pleasure to know that, although no longer on the Council, Sir James was still in full energy and able at any time to assist with his sagacious advice. The retirement of Sir Henry Pitman, too, from work was a loss to professional education, which would be felt more especially by the sister College to which he belonged. The two Colleges were, however, now so happily associated that a loss to one was felt as such by the other. None who knew Sir Henry Pitman could have failed to form such an estimate of his character and ability as would make his retirement from active duty a matter of most sincere regret. Although Mr. Savory had retired voluntarily from the chair which he had filled for four years, he had fortunately not left them in any other sense, and they would still enjoy his services in the Council. It was not the less right that at the end of so prolonged a tenure of the highest office the meeting should express their high appreciation of the dignified and most able manner in which he had discharged his duties. If any resolution were proposed bearing upon matters concerning the College which were at present under adjudication in the law courts, it would be his duty to rule them out of order. The reasonableness of this would be obvious to all. The restriction, however, did not extend far, for the issues before the Court of Chancery at present were distinctly limited. A resolution had been placed before him which affirmed the desirability of giving a vote for the Council to the Members. If the meeting wished it, the resolution must be discussed, but he would call attention to the resolutions adopted by the Council a year ago. In the short summary of the College year which he had put before the meeting he had endeavoured to show that the affairs of the College were in a prosperous condition. There was a life and energy in every department of their multiform organisation. The Council was doing its very best, in the examinations it conducted and in the influence it exerted on medical education, to maintain and raise the standard of professional qualification, to afford to its members the most ample opportunities for the acquisition of surgical knowledge. It was ever ready to defend the dignity of the profession as represented by those who held the diploma. Not the shadow of an abuse that he knew of existed, nor had any personal grievances been brought to the knowledge of the Council. So far as the daily work of the Council was concerned, no one had ever contended that there was any need for important change. It would be unsuitable for him to refer to the merits of the question which the resolution he had alluded to dealt with. It was the earnest desire of the Council that it should be allowed to rest. They were in a state of prosperity, and they prayed for peace. He asked no man to suppress his convictions, but in any discussion which might ensue he hoped they would remember the more important part of the duties which lay before the College; that they would remember at the same time that life was very short and art was very long; that they would take care not to waste their strength in anything which might be likely to prove unprofitable. If he had seemed to praise the actions of the College during the past year, he hoped they would bear in mind that he was praising no individual and no body of men. He was not thinking of the President or the Vice-presidents for the past year; they had simply been those who had temporarily held office under the organisation of the College, being representatives of the Members and Fellows. In conclusion, he asked all to remember that in anything they might think it their duty to do, either as defending the present condition of things or in the very laudable endeavour to improve it, they were the guardians of the interests of an institution which had a long and most noble pedigree, and one which, at the present time, in relation to the promotion of the science of healing as based upon anatomy, biology, and pathology, stood second to none in the world.

Dr. ELLISTON (Ipswich) then moved: "That this meeting

of Fellows and Members of the Royal College of Surgeons of England, having considered the report of the Council dated Oct. 17th, 1889, is of opinion that immediate steps should be taken to forward the introduction early in the next parliamentary session of a Bill to amend the constitution of the College, so as to secure to the Members a just representation in and upon the governing body of the College." He said the motion was brought forward by request of the committee of the Association of Members. He hoped that the moderation of its demands would meet the support of the Fellows and Members. The Council had declined to accede to the requests contained in the resolutions carried at the last annual meeting; a new Charter had been granted, and no provision whatever was made to give the Members of the College any participation in government such as the resolution had called for. Seeing the course that the Council thought proper to adopt, it seemed to the Association that two courses only were open to them. One would be to seek restitution of what they believed to be their just rights in a court of law; the other, and he thought the wiser, course, and the one which they proposed to follow, was to endeavour to obtain an Act of Parliament in the next session for permission to amend the Charter of the College. They adopted this course, not wishing to squander large sums of their own money or that of the College in litigation. They relied upon the inherent justice of their cause in the fact that they had been deprived of their just rights by Royal Charter, and in their belief that no Royal Charter could override an Act of Parliament. No Act of Parliament had, so far as he knew, been attempted to be introduced since 1797. The object of that Act was to do away with the rights and privileges of the Members, but that was rejected. It would be a wise end to the question if they now appealed to Parliament for the solution of this difficulty. The Corporation of the College consisted of Fellows and Members, and it was governed by a Council of twenty-four members elected solely from the Fellows and by Fellows. The Fellowship was now open to any Member of the College who felt himself competent; but it was so shackled with irksome conditions as to age, the amount of hospital curriculum and dissection required, that it was impossible to obtain the necessary credentials unless their lines happened to fall near a school of medicine. The Members failed to see in what way the Fellows were more eligible for the franchise than they were. It seemed extraordinary that the 17,000 Members—most of them general practitioners, hospital physicians and surgeons in the public service of the State—should not be considered equal to exercise this franchise. Certainly, it might be said of them that they were not the least cultured or intelligent of Her Majesty's subjects. No doubt the expenditure of the College was carefully watched over; but, in spite of the large annual income of £28,476, the expenses on capital account had been so large that stock had been sold out to the extent of £3600, and the balance of £4000 at the beginning of the year was reduced to a matter on the other side. In questions of finance of that kind the Members were quite as competent as the Fellows to give an expression of opinion, and that was one great reason why the franchise should be extended. They believed, too, that the change was necessary in the interest of the College itself. Time was when the great bulk of the profession obtained their surgical diplomas from that College; but now in every district were numbers of men who had obtained qualifications elsewhere who would not care for the further expenses of the membership of that College if the privilege offered them was merely that which they had already—the right to practise.

Dr. DANFORD THOMAS seconded the resolution. He said the course mentioned therein had been resolved upon after very careful consideration, and steps were being taken to ensure its success. The Bill had already met with a very favourable response from a very large number of Members of Parliament, and Lord Randolph Churchill had promised to introduce it in the Commons. He hoped that the Council, if they desired a peaceful solution of the question, would take no steps to oppose that Bill.

Dr. WILLIAM HAUGHTON said that, if the alleged rights of the Members existed, the proper tribunal in which to assert them was the High Court of Justice. The reason that those rights were not taken there for adjudication was very obvious—viz., they did not exist. It was something new to him to be told that Parliament could interfere to take its rights away from a Corporation any more than from a private individual, and he believed that, whatever resolution the Members might pass, Parliament would not interfere and take away rights which had hitherto been regarded as inviolable.

Mr. W. C. STEELE stated that the Members had proceeded to the courts of law on this question, and they had not asked the Crown to alter the Charter of the College.

Surgeon-Major SMITH having expressed the strong feeling of the profession in Bristol, as shown by the large number of signatures obtained to the petition,

The resolution was put and declared to be carried by a large majority.

On the motion of Mr. BROWN, seconded by Dr. COLLUM, a resolution of thanks was accorded to the President for his introductory address and conduct of the meeting.

The proceedings then terminated.

SANITATION IN BRUSSELS.

(From our Special Correspondent.)

IT will be remembered that at the International Congress of Hygiene, when Dr. Martin described the wonderful saving of human life achieved by the Sanitary Bureau of Brussels, an ovation was given in honour of its chief director, Dr. Janssens. The death-rate of Brussels has been reduced in a manner that is admirably illustrated by charts, recently published. On examining these charts, it will be seen that the average death-rate of Brussels from the years 1868 to 1873 was 29·3 per 1000 of the population, and the zymotic death-rate 4·60 per 1000. From 1874 to 1876 the Bureau d'Hygiène dealt with an annual average of 757 cases relating to sanitation; 237 insalubrious houses were improved, and 399 premises were disinfected. From 1874 to 1878 the average death-rate fell to 25·7 per 1000, and the zymotic death-rate to 2·02. From 1877 to 1879 the sanitary authorities had to deal with, on an average, 801 cases. They improved 325 dwellings and disinfected 243 premises. From 1879 to 1883 the average death-rate was 25·3, and the zymotic death-rate 1·58. The average sanitary works from 1883 to 1885 were 1916, no less than 1155 dwellings had to carry out sanitary improvements, and 491 premises were disinfected. Finally, from 1886 to 1888 the average number of cases that came under the notice of the Bureau d'Hygiène annually rose to 2146. Sanitary works were executed in 1241 houses and 367 premises were disinfected. As the work of the sanitary authorities increases, we note a corresponding decrease in the death-rate, and, what is still more significant, in the death-rate from zymotic diseases. Thus the average death-rate from 1884 to 1887 was 23·9 per 1000, and the zymotic rate 1·66; while the death-rate in 1888 was 22·9, and the zymotic rate 1·31. The zymotic death-rate has, therefore, fallen from 4·60 (average of the years 1868–73) to 1·31 in 1888, and the general death-rate from 29·1 to 22·9 in the same period. On the other hand, the number of cases of insalubrity coming under the notice of the sanitary authorities, nuisances removed, sanitary improvements accomplished, or premises disinfected, has increased from the annual average of 757 to 2146. As was stated at the International Congress of Hygiene, the Brussels Sanitary Bureau costs 48,000 francs per annum; and if we estimate every life saved at only £40, this outlay in sanitary administration is equal to an investment bringing in an annual interest of 1400 per cent.

As I was able briefly to explain, when describing the debates of the International Congress of Hygiene, these excellent results have been achieved by a strict enforcement of the French law of Dec. 14th, 1789, and that of August 16th and 24th, 1790—laws that came into force in Belgium when the French Republican army had triumphed at Jemappes and Fleurus. These laws have been further strengthened by the enactment of the 30th March, 1836, and the article 471 of the Belgian Penal Code. In France, on the other hand, the law of the 10th April, 1850, rendered the excellent Sanitary Acts of 1789 and 1790 inoperative. The town of Brussels, basing its action on the legislation just mentioned, has drawn up bye-laws containing the following clauses:—

"Art. 120: The College of the Bourgmester and sheriffs is authorised to prohibit the habitation of houses,

tenements, &c., that are unclean, where there is not sufficient ventilation, and where the drainage is such as to compromise, in a permanent manner, the public health."

If the owner of a property refuses to carry out the sanitary improvements demanded by the Bureau d'Hygiène, a report is drawn up by the Local Medical Commission, and, after due notice to the inhabitants, the police compel them to evacuate the premises. The legal proceedings that lead to these extreme measures are simple and rapidly executed. They can give rise to no wearisome contentions, to no expensive litigation. The tenants who are driven out have a right to prosecute their landlord for the inconvenience and disturbance. They demand and generally obtain very heavy damages. Consequently, when the landlord sees, after a little resistance, that the sanitary authorities are in earnest, he almost invariably does all that is required. The bye-laws relating to the construction of houses clearly describe what should be done by every house owner. Art. 79 stipulates that every building serving as a place of habitation or of meeting should be provided with closets that have a door or a window opening on to the outer air, and that are so constructed as to in no wise endanger public health. Where one closet is used by more than one family, there must be at least one seat for every twenty-five inhabitants. A great number of regulations have been drawn up with regard to the construction, fall, diameter, &c. of the soil and drain pipes. These coincide with our English principles of domestic drainage. Art. 91 enforces the principle that every drain pipe must be trapped. The soil pipe traps or syphons placed within the houses must (Art. 92) have a dip equal to six centimetres (about two inches and a half). But the traps or gullies placed in yards or gardens must have a smaller dip. Consequently, if pressure from the sewers forces the gases through these traps, those in the open air will be the first to yield. If more than one closet communicate with a soil pipe, to prevent syphonage the soil pipe must be prolonged to the roof of the house and there left open for ventilation purposes. If any house in Brussels does not conform to these stipulations, an anonymous communication may be addressed to the Bureau d'Hygiène. This will lead to an inquiry and the prompt adoption of the measures necessary to have all defects removed.

Such, briefly, are the sanitary enactments with regard to the construction of dwellings which have been enforced of late years with much rigour and very excellent results. But this alone has not sufficed to bring about the notable decrease in the death-rate demonstrated by Dr. Janssens' charts. Vaccination—from the calf—has been employed with ever-increasing zeal; and very noteworthy improvements have followed the gratuitous administration of preventive medicine in primary schools. All the children are carefully and medically examined; the feeble are supplied, at public expense, with cod liver-oil and other suitable medicaments.

Dr. Janssens has also introduced an excellent measure to render disinfection more effective and practical. He has succeeded in obtaining possession of an old Octroi or Customs Post, situated in the centre of the broad Boulevard du Midi. This building occupies, at some distance from the busiest parts of the town, and yet not too far away, a comparatively isolated position. The public disinfector and his wife live on the premises. On the first floor there are dormitories, carefully ventilated and kept scrupulously clean. Here are conveyed, free of all cost, the families from tenements undergoing the process of disinfection. A good warm bath is given them on admittance, and an excellent breakfast of milk and coffee and bread. They remain in this sanatorium twenty-four or forty-eight hours, according to the time it may take to thoroughly disinfect their homes. The accommodation is generally superior to that afforded in their own dwellings, the beds are beautifully clean and very comfortable, the caretaker kind and sympathetic. The building has a dignified official look; it stands out well in the midst of trees, and seems like a little mansion. Therefore there is no prejudice against the institution. The poor people go there willingly. Care is taken that they should not imagine that they are receiving any charity; but, on the contrary, they are taught that, by thus facilitating the work of the sanitary authorities, they are performing a duty for the benefit of the public. By methods such as these, by a humane policy which is at once wise and just, the work of sanitation is rendered popular even among the most ignorant.

With the same judicious spirit a public mortuary has been established in the very heart of the town, close to the Central Market. The vestry of an old church was selected for this purpose. It is a handsome building, with a beautifully sculptured and lofty roof. Openings have been cut in the walls, so that there is a very ample and thorough ventilation. On either side of the room there are receptacles for the bodies of the dead, and these can be walled off by movable wooden partitions or screens. Thus the family may come and sit or pray in private by the body in an atmosphere which is constantly renewed. This institution has proved a great boon to the poorer sections of the population, who can thus, pending burial, dispose of the bodies of loved relations without any sense of humiliation or any feeling that they are not paying sufficient respect to the lost friend or parent. Such are some of the principal measures taken by the Bureau d'Hygiène of Brussels; and, in conclusion, I may quote a few more figures from another chart, also published by the chief of the bureau, Dr. Janssens. These set forth the average mortality from diphtheria, croup, typhoid fever, small-pox, measles, and scarlet fever, in sixteen principal towns of Europe. During the years 1875 to 1888 the average annual mortality per 10,000 inhabitants, caused by these diseases was 67·5 in St. Petersburg, 44·6 in Bucharest, 42·4 in Buda-Pesth, 31·2 in Christiania, 31 in Berlin, 29 in Stockholm, 28·7 in Rome, 28 in Munich, 27·9 in London, 25·1 in Paris, 25 in Vienna, 24·6 in Dresden, 24 in Amsterdam, 22·9 in Copenhagen, 22·1 in Bern, and only 17·5 in Brussels!

PROVINCIAL MEDICAL MAYORS.

OF the 280 Mayors elected in England and Wales, on Saturday, the 9th inst., to serve for the ensuing year, the following are members of the medical profession:—

Bath.—Alderman John Stothert Bartrum, F.R.C.S. Eng., L.S.A. Second time of election.

Bedford.—Alderman James Coombs, M.D. Erlang., M.R.C.S. Eng., J.P. Second time of election.

Congleton.—Alderman Hugh Moss, M.D. St. Andrews, M.R.C.S. Eng., L.S.A.

Hedon.—Mr. William Kirk, M.R.C.S. Eng., L.S.A.

Hull.—Mr. John Sherburn, M.B. Edin., C.M., M.R.C.S. Eng.

Leicester.—Mr. Henry Lankester, M.R.C.S. Eng. and L.S.A.

Pembroke.—Alderman Joshua Wm. Morison, L.R.C.P.E., M.R.C.S. Eng., L.S.A., J.P.

Rye.—Mr. John Amos Woodhams, M.R.C.S. Eng., L.S.A., J.P.

Wrexham.—Mr. Henry Venables Palin, M.B., C.M., L.R.C.P., L.R.C.S., L.S.A. Re-elected.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following are the new regulations relating to the Diploma in Dental Surgery just passed by the Council of the College:—

Education.—Candidates who registered as Dental Students on or after Jan. 1st., 1890, are required to produce the following certificates:—1. Of registration as a dental student by the General Medical Council, 299, Oxford-street, London, W. 2. Of having been engaged during four years in the acquirement of professional knowledge, subsequently to the date of such registration. 3. Of having received instruction in chemistry, including chemical physics, practical chemistry, and materia medica. 4. Of having attended, at a recognised medical school: (*a*) A course of lectures on anatomy during not less than six months, or one winter session; (*b*) a course of lectures on physiology during not less than six months, or one winter session; (*c*) a separate practical course of physiology during not less than three months; (*d*) a course of lectures on surgery during not less than six months, or one winter session; (*e*) a course of lectures on medicine during not less than six months, or one winter session. (Students are required to attend examinations which are held in the several classes.) 5. Of having performed dissections at a recognised school during not less than twelve months. 6. Of having attended, at a recognised hospital or hospitals, in the United Kingdom the practice of surgery and clinical lectures on surgery during two winter sessions. 7. Of having attended, at a recognised school, two courses of lectures upon each of the following subjects—viz., dental anatomy and physiology (human and comparative), dental surgery, dental mechanics, and one course of lectures on metallurgy, by lecturers recognised by this College. (Students are required to attend examinations which are held in the several classes.) 8. Of having been engaged, during a period of not less than three years, in acquiring a

practical familiarity with the details of mechanical dentistry, under the instruction of a competent practitioner. In the cases of qualified surgeons evidence of a period of not less than two instead of three years of such instruction will be sufficient. (This instruction may be taken prior to the date of registration as a dental student.) 9. Of having attended at a recognised dental hospital, or in the dental department of a recognised general hospital, the practice of dental surgery during the period of two years. 10. Of being twenty-one years of age.

Note.—Professional study prior to the date of registration as a dental student is not recognised except in the case of chemistry, practical chemistry, and materia medica, and of instruction in the details of mechanical dentistry; see clauses 3 and 8.

Examination.—The examination is partly written, partly practical, and partly oral. The written examination comprises general anatomy and physiology, general pathology and surgery, dental anatomy and physiology, and dental pathology and surgery. At the practical examination candidates may be examined: (*a*) On the treatment of dental caries, and may be required to prepare and fill cavities with gold or plastic filling or material, or to do any other operation in dental surgery (candidates must provide their own instruments); (*b*) on the mechanical and surgical treatment of the various irrregularities of children's teeth; (*c*) on mechanical dentistry. The oral examination comprises the several subjects included in the curriculum of professional education, and is conducted by the use of preparations, casts, drawings, &c. Candidates who have passed the second examination of the Examining Board in England, or who shall produce evidence of having passed the examination in anatomy and physiology required for the licence in Surgery of the Royal College of Surgeons of Edinburgh, the Royal College of Surgeons in Ireland, or the Faculty of Physicians and Surgeons of Glasgow, or an examination in anatomy and physiology required for a degree in Medicine or Surgery at a University in the United Kingdom, will be exempt from re-examination in those subjects. Candidates, who are Members of the College, or who have passed the examination in Surgery of the Examining Board in England, or who shall produce evidence of having passed the examination in surgery for the licence in surgery of the Royal College of Surgeons of Edinburgh, the Royal College of Surgeons in Ireland, or the Faculty of Physicians and Surgeons of Glasgow, or an examination in surgery for a degree in Medicine or Surgery at a University in the United Kingdom, will be exempt from re-examination in general surgery and pathology. A candidate whose qualifications shall be found insufficient will be referred back to his studies, and will not be admitted to re-examination within the period of six months, unless the board shall otherwise determine. Examinations will be held in May and November in each year. Candidates are required to give fourteen clear days' notice of their intention to present themselves for examination. The fee for the diploma is ten guineas.

Note.—A ticket of admission to the museum, to the library, and to the College lectures will be presented to each candidate on his obtaining the diploma. EDWARD TRIMMER, Secretary.

March 8th, 1888.

BRITISH NURSES' ASSOCIATION.

THE following statement has been forwarded to us for publication:—

To the Chairman of the Committee of Management of the .....

SIR,—Fifteen years ago Dr. (now Sir Henry) Acland, President of the General Medical Council of the United Kingdom, suggested the advisability of the registration of trained nurses and midwives. Since then nursing has become universally recognised as a skilled calling; the training to which nurses are subjected in hospitals, and the general usefulness of these workers, have alike materially advanced; but to a large extent both these improvements are still nullified, so far as the public is concerned, because any woman, however ignorant of nursing or midwifery she may be, can without let or hindrance term herself a trained nurse or midwife, can obtain employment in private houses in either capacity, and by her ignorance bring about great danger to the sick and discredit to the calling. At present there is no possible means of preventing this evil, or even of controlling midwives or nurses who, once certificated, become unworthy of trust. For instances are, unfortunately, well known where such women, by drunkenness, theft, or even graver faults, have brought repeated disgrace, not only upon themselves, but also upon the hospital whose testimonial they are able on each occasion to produce. It would, therefore, seem to be most manifestly for the good name of nurse-training schools, as well as for the benefit of nurses themselves, and for the safety of the public, that some system should be enforced which would (1) furnish an official and easily-ascertained guarantee of the technical efficiency of every trained nurse or midwife; (2) prevent any certificated nurse or midwife who has been proved unworthy of trust from again disgracing her training school and her calling.

For two years past this Association has been carefully considering the subject, and now suggests that a system of registration of certificated nurses and midwives should be so carried out as to meet both these essential requirements. It is, doubtless, unnecessary to remind you that this system has for many years been enforced by law for the medical and other professions, and that the control of medical registration is confided to the General Medical Council, which is composed of representatives of every university and medical corporation. This Association, then, suggests that for a certain limited "period of grace" every woman who can produce proofs of having been actually engaged for three years in tending the sick or women in labour, and of satisfactory moral and professional character, should, as a matter of justice and "prescriptive right," be enrolled on the Register, but that thereafter only those who can bring satisfactory evidence that they have been efficiently trained should be registered. And, furthermore, that the authority conducting the registration should have power to remove temporarily, or permanently, from the Register the name of any registered nurse or midwife who proves herself unworthy of that title to public confidence. The Association suggests that a Registration Council should be formed, upon which—in view of the importance of this matter to those engaged in training nurses—every training school for nurses and midwives in the United Kingdom is now invited to appoint a representative; the British Nurses' Association, as comprising more than one-fifth of the whole nursing profession, being represented by the members of its executive committee. It is hoped that to the council thus constituted may be added a certain number of representative medical men. It is suggested that the council should meet once or twice a year, should draw up all the necessary rules and regulations for registration, and be, in short, the governing body of the scheme. It is next suggested that once in three years the council should appoint from its members a Registration Board of about twenty-four persons, to meet as often as requisite, to supervise and carry out the details of registration.

Her Royal Highness Princess Christian and the members of the executive committee of this Association have promised to act upon the proposed council. For the opinions of the President of the General Medical Council and of many eminent medical men as to the grave importance of registration we beg to refer you to the report, and other papers accompanying this.

We would now venture to request you, Sir, to be good enough to bring this matter to the notice of the Committee of Management of your great institution, feeling confident that your co-operation may be hoped for in the effort to secure a very necessary measure of professional reform and public utility. Should your committee be willing to appoint your matron or one of your medical staff to express your views and wishes upon this Registration Council—and, if elected thereto, upon the Board—the executive committee of the Association would feel much indebted if you would acquaint us with the fact as soon as possible. It is proposed to hold a first meeting of the Council on Friday, Dec. 6th, at 2 P.M.; and it would be the wish of the Association to offer some small measure of hospitality to your representative. An early reply would, therefore, greatly oblige, Sir, yours faithfully,

BEDFORD FENWICK, M.D., Hon. Secretary.
CATHERINE J. WOOD, Secretary.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Bethnal Green.—On an estimated population of 130,500, Dr. G. P. Bate gives the death-rate for this division of the metropolis as 22·6 during 1888, the birth-rate having been 37·8 per 1000 during the same period. Nearly half the total deaths—namely, 48·7 per cent.—were amongst children under five years of age; indeed, it is assumed that the death-rate amongst children reaches 72·1 per 1000 of those living under that age. Scarlet fever was somewhat in excess during the year; and diphtheria caused 52 deaths in addition to 46 fatal cases of so-called "croup." Some of the excess of diphtheria mortality is regarded by Dr. Bate as due to altered fashion, since cases of membranous laryngitis, which formerly were styled croup, are now set down as diphtheria. Few can object to the change, for many attacks of diphtheria in its fatal form have been brought about by want of caution in dealing with so-called attacks of croup. It is satisfactory, in one sense, to note that only two deaths were uncertified, although it has to be remembered that Bethnal Green is the happy hunting ground of "fourpenny dispensaries," where, it is to be hoped, the skill in treatment is not to be measured by the amount of fee at which the dispenser appraises his services. Indeed, a shilling secures registered medical attendance with medicine for a whole week, and hence it would hardly be creditable to die without a doctor's certificate. A good deal of attention has been given to offensive trades, especially in connexion with the flock factory nuisance, and a number of premises have been reported under the Artisans and Labourers' Dwellings Acts, 1868.

St. Mary, Islington.—Dr. Tidy reports a birth-rate and death-rate of 27·6 and 14·0 per 1000 respectively, the rate of mortality from zymotic diseases being the lowest on record. A number of dwellings were reported during 1888 under Torrens' Act, and Dr. Tidy hopes that some to which he especially refers will be demolished. A scheme for demolition and subsequent improvement has also been reported to the London County Council. Amongst houses let in lodgings, 327 are upon the register, and are duly visited. Under the Sale of Food and Drugs Acts, 480 samples were submitted for analysis by the inspectors, and in 37 instances the adulteration detected led to prosecutions. These were made up of 31 samples of milk, 3 of cocoa, 1 of pepper, 1 of rum, and 1 of butter. No fault was found with the remaining 443 samples.

Basford Rural District.—This district contains some important manufacturing and mining localities near Nottingham, and, notwithstanding a period of depression, a number

of new houses continue to be built. The birth-rate for 1888 was 33·8 per 1000 living, the lowest on record; fortunately the death-rate was also low—namely, 14·7 on an estimated population of 51,957. The zymotic rate was 1·80, diarrhœa and whooping-cough being the largest contributors to the zymotic mortality. As regards the former of these causes, Dr. Boobbyer points out that three out of four of the children brought up by hand die in indirect consequence of hand-feeding; and it is well known that hand-fed children suffer often from a neglect of which the refusal of the breast is only one indication. Enteric fever has appeared autumnally in Kirkby, where the poison diffuses itself mainly through local water supplies. A new public supply has now been brought in, and it is hoped that this may lead to an abatement of the disease in the future. At Nuncar Gate, five out of eight persons helping to nurse a baby suffering from enteric fever sickened of the disease, the poison being in all probability diffused by the washing of the infant's soiled napkins at a sink without the adoption of any proper precautions. Such cases should prevent general statements being made to the effect that enteric fever is not infectious, the difference between it and other specific fevers in this respect lying essentially in the variety of the vehicles by which the infection is conveyed and of the channels by which it is received into the system. A voluntary scheme of notification in the district is said to work well and to be of value for sanitary purposes; but the authority lack the means to give the most important effect to the information they thus receive, for they have neither a hospital for isolation purposes nor any ground on which a temporary erection could be put up in case of an emergency. Nottingham has declined to allow of combination with Basford for this purpose. Dr. Boobbyer has endeavoured to secure proper midden-privy construction by issuing lithographs of a design embodying modern principles. But its adoption is voluntary, and hence it in some respects fails, an admission which seems to imply that the local bye-laws regulating new buildings are imperfect. But perusal of the annual report shows that carefully supervised sanitary work is steadily in progress.

Malton Urban District.—Dr. William Young records a death-rate of 14·5 per 1000 during last year; and he states that there was no death from either scarlet fever, diphtheria, or diarrhœa, besides which no small-pox death has taken place for sixteen years. The subject of the contamination of the town water by floods is a matter which calls for attention, and the mere fact that chemical analysis of individual samples does not reveal the precise form which the danger assumes should by no means weigh with such obvious signs as that which the altered colour of the water affords of the presence of matters which it should not contain. The schools are regularly inspected, and systematic supervision over the district is said to be maintained.

Malton Rural District.—This sanitary district is also within the jurisdiction of Dr. Young's area for health purposes, and it had during 1888 a death-rate of 11·5 per 1000. The list given of sanitary inspections and local improvements effected shows that a large number of matters still need constant and unremitting attention, and that it is only by the adoption of permanent improvements that the proper standard of health can be maintained. Sickness from preventable causes fortunately receives attention, as well as fatality of attack; and where school influence is expected to be operative in spreading disease measures are taken in co-operation with the school officials to stay any further mischief from this cause. It is satisfactory to note that during the year no death was registered as due to diarrhœa.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5967 births and 3321 deaths were registered during the week ending Nov. 9th. The annual rate of mortality in these towns, which had been 17·5 per 1000 in each of the preceding two weeks, rose last week to 18·1. During the first six weeks of the current quarter the death-rate in these towns averaged 17·8 per 1000, and was 2·6 below the mean rate in the corresponding periods of the ten years 1879-88. The lowest rates in these towns last week were 12·2 in Birkenhead, 13·6 in Salford, 15·0 in Brighton, 15·4 in Nottingham, and 15·5 in Norwich. The rates in the other towns ranged upwards to 24·5 in Preston, 24·6 in Bradford, 24·9 in Sunderland, 25·0 in Newcastle-upon-Tyne, and 26·0 in Plymouth. The deaths referred to the principal zymotic diseases, which had been 356 and 364 in the preceding two weeks, declined last week to 326; they included 81 from scarlet fever, 66 from measles, 51 from whooping-cough, 47 from "fever" (principally enteric), 43 from diarrhœa, 36 from diphtheria, and only 2 from small-pox. No death from any of these zymotic diseases was registered last week in Halifax; while they caused the highest death-rates in Wolverhampton, Preston, Sunderland, and Plymouth. The greatest mortality from scarlet fever occurred in Birmingham, Blackburn, Wolverhampton, Bolton, and Plymouth; from measles in Wolverhampton, Nottingham, Preston, and Sunderland; from whooping-cough in Oldham, Wolverhampton, and Portsmouth; and from "fever" in Derby and Cardiff. The 36 deaths from diphtheria included 23 in London and 2 in Plymouth. Small-pox caused 1 death in London and 1 in Bolton, but not one in any of the twenty-six other great towns. No small-pox patient was under treatment at the end of the week either in the Metropolitan Asylum Hospitals or in the Highgate Small-pox Hospital. The number of scarlet-fever patients in the Metropolitan Asylum and the London Fever Hospitals at the end of the week was 1557, against numbers increasing in the preceding nineteen weeks from 559 to 1500; 204 cases were admitted to these hospitals during the week, against 188, 182, and 135 in the previous three weeks. The deaths referred to diseases of the respiratory organs, which had been 281 and 300 in the preceding two weeks, further rose last week to 318, but were 107 below the corrected average. The causes of 62, or 1·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Portsmouth, Brighton, and in nine other smaller towns; the largest proportions of uncertified deaths were registered in Huddersfield, Leicester, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·3 and 20·3 per 1000 in the preceding two weeks, declined again to 19·8 in the week ending Nov. 9th; this rate exceeded by 1·7 the rate that prevailed during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 7·9 in Perth and 15·6 in Dundee, to 20·4 in Leith and 24·1 in Glasgow. The 507 deaths in the eight towns showed a decline of 12 from the number in the previous week, and included 10 which were referred to measles, 10 to diphtheria, 10 to diarrhœa, 9 to scarlet fever, 8 to whooping-cough, 6 to "fever" (typhus, enteric, or ill-defined), and not one to small-pox; in all, 53 deaths resulted from these principal zymotic diseases, against numbers declining in the six preceding weeks from 74 to 53. These 53 deaths were equal to an annual rate of 2·1 per 1000, which exceeded by 0·3 the mean rate last week from the same diseases in the twenty-eight English towns. The deaths from measles, which had been 9 and 7 in the previous two weeks, rose last week to 10, of which 6 occurred in Glasgow and 3 in Edinburgh. The 10 fatal cases of diphtheria exceeded the number in the previous week by 1; and included 4 in Edinburgh, 2 in Glasgow, 2 in Aberdeen, and 2 in Paisley. The deaths attributed to diarrhœa showed a further decline from recent weekly numbers. Of the 9 deaths from scarlet fever, 4 occurred in Glasgow, 3 in Edinburgh, and 2 in Leith. The 8 fatal cases of whooping-cough showed a further decline from recent weekly numbers, and included 6 in Glasgow. The deaths referred to "fever," which had been 11, 6, and 4 in the previous three weeks, rose again last week to 6, of which 3 occurred in Edinburgh and 2 in Glasgow. The deaths attributed to acute diseases of the respiratory organs in the eight towns, which had increased in the preceding four weeks from 87 to 153, declined again last week to 121, but were 37 above the number in the corresponding week of last year. The causes of 51, or 10 per cent., of the deaths registered in the eight towns were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 21·0 and 27·3 per 1000 in the preceding two weeks, declined again to 24·5 in the week ending Nov. 9th. During the first six weeks of the current quarter the death-rate in the city averaged

24·8 per 1000, the mean rate during the same period being 16·2 in London and 17·1 in Edinburgh. The 166 deaths in Dublin showed a decline of 19 from the number in the previous week, and included 13 which were referred to "fever" (typhus, enteric, or ill-defined), 2 to whooping-cough, 2 to diarrhœa, 1 to measles, 1 to diphtheria, and not one either to small-pox or scarlet fever. Thus the deaths from these principal zymotic diseases, which had been 18 and 19 in the previous two weeks, were again 19 last week; they were equal to an annual rate of 2·8 per 1000, the rate from the same diseases being 1·4 in London and 2·7 in Edinburgh. The deaths referred to "fever," which had been 10, 6, and 11 in the preceding three weeks, further rose last week to 13, and exceeded the number returned in any previous week of this year. The 2 fatal cases of diarrhœa showed a further decline of 5 from the numbers returned in recent weeks. The deaths both of infants and of elderly persons were fewer than those returned in the previous week. Two inquest cases and no death from violence were registered; and 59, or more than a third, of the deaths occurred in public institutions. The causes of 14, or 8 per cent., of the deaths in the city were not certified.

DEATHS IN NAPLES IN 1888.

The statistics of deaths in Naples in 1888 which have just been published in a Foreign Office report show that the average death-rate per 1000 was 27·5, being a diminution of 0·7 per 1000 as compared with the preceding year. Altogether, the deaths numbered 14,963, including diseases of the fœtus and congenital malformations, 258; syphilis, 96; marasmus and senile wasting, 587; diseases of the nervous system, 2272; diseases of the respiratory organs, 5481; diseases of the circulatory apparatus, 1314; of the digestive apparatus, 1901; of the reproductive and urinary systems, 358; of pregnancy and childbirth, 91.

Correspondence.

"Audi alteram partem."

THE SO-CALLED PRESYSTOLIC MURMUR.

To the Editors of THE LANCET.

SIRS,—Before I touch upon any correspondence which my recent lecture on the so-called presystolic murmur has called forth, I may say a word about some valuable observations by Drs. Fenwick and Overend, which appeared shortly after it. Their paper records, among other matters, the attempt in two cases to associate the so-called presystolic murmur as heard with the stethoscope with the movements of the heart as displayed by the cardiograph, and the conclusion that the murmurs they observed were truly presystolic. Such observations cannot but have weight. I must own myself to want of skill with this instrument. I found the apex so much covered by machinery that the use of the stethoscope at the same time was not satisfactory. I therefore had recourse to the simpler cork and pin as a means of timing the apex beat; but afterwards came to think that the unassisted but practised finger, or the ear upon the skin, gave for timing murmurs the best indication of the heart's impulse. Be this as it may, the subject must be pursued with the help which this paper affords.

With regard to the two cases from which Drs. Fenwick and Overend have given tracings, I would observe as to the first that the murmur to which the term presystolic is applied began *immediately after the second sound*, and corresponded with the part of the tracing which marked the diastole. But was this the so-called presystolic murmur? Was it not rather what is known as the mitral diastolic? It was an indubitably diastolic murmur, for it immediately followed the second sound which the so-called presystolic does not. This murmur was probably truly presystolic, but was it the murmur in dispute? As to the second case there were two murmurs: one beginning in the middle of the diastole, the other systolic. The question which suggests itself again is whether the first murmur was not what would be called the mitral diastolic rather than the presystolic. What was the systolic murmur? Was it an ordinary systolic or what some would call presystolic? In a case of mitral stenosis, as this apparently was, the two murmurs which most often present themselves together are the mitral diastolic and the so-called presystolic. I think that further investigations on the lines pursued by Drs. Fenwick and Overend will be well rewarded, and I for one shall look with interest for the results.

The same number of THE LANCET contains a letter from Dr. Acland which is addressed so pointedly to myself as to call for reply. I state that the knock or snap which immediately follows the so-called presystolic murmur occurs at or towards the end of the systole. Dr. Acland finds it not easy to understand that the snap should occur during the systole, while that it should occur at the end of the systole is to him incomprehensible. The case stands thus: unless there is a murmur which runs through it, which is not often, the knock, however it may be made, stops abruptly; there is nothing ostensible after it but the short silence and then the second sound. Hence it would seem that with the knock the systole is so far over that nothing remains of it afterwards except what can be conducted silently. Very shortly comes the second sound, when the blood is evidently going the other way. Obviously enough ventricular contraction survives the knock to account for the short prolongation of the murmur beyond it when it is so prolonged, or when in common phrase a presystolic murmur runs into a systolic. But whether or not a little blood leaves the ventricle after the snap is less to the point than whether the major part of the systole is transacted before it; which I maintain to be the case. These remarks will apply also to Dr. Reynolds, who is much in accord with Dr. Acland in this matter.

Next says Dr. Acland, "If the first part of the murmur preceding the snap be really regurgitant, and the second soft blowing murmur which follows it be also regurgitant, then there are two murmurs generated by a flow of blood in the same direction and at the same orifice, differing entirely in character and often separated by an interval, a possibility which cannot be entertained." Now I deny that the so-called presystolic murmur is thus separated from the systolic which follows it; to my hearing the two are inseparable and continuous. I agree with Dr. Acland in not entertaining the possibility of two murmurs generated by a flow of blood in the same direction, at the same orifice, and yet different and separate. But is not Dr. Acland here like the prophet who was inspired against his will?—is he not supporting the cause which he meant to oppose? Is not the direct mitral murmur continually separated by an interval from the so-called presystolic? Does it not differ from it entirely in character, and are not the two, on the theory which Dr. Acland espouses, both made at the same orifice by blood flowing in the same direction? I myself have hesitated to adopt this view, and shall hesitate the more now that I have Dr. Acland's countenance. Dr. Acland tells us that the carotid beat occurs *after* the snap, and adds that the blood takes a tenth of a second to get from the ventricle to the carotid. Here I say, with a greater logician, "I deny your major." I have taken all the pains I am capable of with finger and stethoscope, and have convinced myself that there is no appreciable interval between the snap and the beat, but that the beat follows coincidently with the snap immediately after the so-called presystolic murmur—the murmur runs up to the beat. I may be wrong, but my senses give me this evidence, and upon this I found. Dr. Acland demurs to my view that the first sound of the heart is in great measure produced within the ventricle. I need not follow him with any disquisition on this matter, but will briefly call his attention to some experiments made many years ago by Dr. Halford which I well remember. In these Dr. Halford produced a very fair imitation of the first sound by passing water through a dead heart in which the contraction was imitated by external force.

I thought that the thrill so often heard in these cases was synchronous with the apex beat, an observation which, if correct, had its value. I here left it without discussing the cause with the remark that the circumstances of blood thrills were various. If systolic, that was enough for the purpose. I like to proceed with caution when the subject is difficult, and go no further than I think I can see my way. But this does not satisfy Dr. Acland, who "can hardly think that such an uncertain statement is calculated, as Dr. Dickinson predicts, to relegate the presystolic

murmur to a place among the errors of the past." Of course not. I cannot suppose my argument to be advanced by what I do not state, but only by what I do. Where I confess or imply ignorance (and occasions press at every turn) there the evidence ceases: the confession is warrant rather of my integrity than my intelligence. But it does not follow that because I do not know everything, therefore I do not know anything. An observation or argument may be valid though we do not add another to it. We must stop somewhere, and perhaps my command to halt comes soon in the march. I do not pretend to know all about blood thrills; I suppose Dr. Acland does, for he would scarcely twit me with uncertainty were he uncertain too. I can only congratulate him on having attained at so early a time of life to information so extensive and so sure.

Dr. Reynolds opens his discourse with admonition rather than argument. He rehearses for my benefit some excellent words with which Professor Foster warns us to distinguish between good and bad physiology, and to discard the bad. The advice is good, but as it is apparent that by good physiology Dr. Reynolds means his own, by bad mine, there may be two opinions as to the application of it. Considering that there are two sides to this question, or he would not be writing about it now, Dr. Reynolds' letter is curiously pervaded with an assumption of the matters in dispute. With regard to the time of the apex beat in relation to the snap, a question at the root of the whole matter, Dr. Reynolds says that "as everyone agrees the actual apex beat occurs with the snap." I must be nobody, for I do not agree with this. Not that I accuse Dr. Reynolds of intentionally reducing me to a nonentity, but I must try to put clearly my difference with him on this point. I think that the actual apex beat occurs mainly before the snap, and on these grounds. In a well-marked case of mitral stenosis, with a so-called presystolic murmur in a thin person, it is common to feel and see a long heaving or lifting of the surface over the apex which, so far as I see, can only be from ventricular movement; this not only protrudes the skin, but imparts hardness; it accumulates and then lessens. This visible and palpable impulse is to my senses coincident with the murmur, or at least continues with it, though in some cases the murmur may begin an almost inappreciable fraction of time before it—the valve may begin to leak before the motion is appreciable externally. This movement runs up to and ends at the snap. I have often asked myself whether it be possible that this conspicuous impulse should be made by the filling of the ventricle before systole, but I have been unable to reconcile this view with what we know of cardiac action. I am aware that the cardiograph shows a slight elevation of surface before systole, but the strong visible impulse to which I have referred can scarcely be of this nature. If, then, it be systolic, so is the murmur, if I may attach any weight to my own observations, and with the murmur is usually the thrill. Thus, far from agreeing with Dr. Reynolds that the true apex beat accompanies the snap, my position is that it precedes it.

Next I come to a small misunderstanding into which Dr. Reynolds has fallen, with no fault of mine. He says: "Dr. Dickinson ignores the auricular systole in his diagrams (!), as he says they are matters of physiological rather than clinical observation. Why ignore clinically?" &c. "They" refers to the auricular systole. But I have not ignored the auricular systole in my diagrams. On the contrary, I give it name and place; and, as if to guard against any misconception, I allot two columns to it—one at the end of the chart, one at the beginning. I can only suppose that Dr. Reynolds has misunderstood what was, I thought, clear in the few words of explanation with which I introduce the diagrams. I say that the division indicating the auricular systole is a matter of physiological rather than clinical observation, while the position of the apex beat of the second sound and of the carotid pulse could be ascertained clinically. The apex and the carotid are to be felt, the second sound is to be heard. These, therefore, are our landmarks. The auricular systole, as real, is not ordinarily distinguishable by sight or hearing, and has its place assigned as the result rather of physiological than clinical observation. By clinical observation I mean observation upon human beings in bed. Were the thorax open to view, or were our patients dogs, it might be different. It is obvious that the murmur cannot be used as the clinical indication of the physiological fact, because, in the first place, it is not always present; in the second, the position of the murmur with regard to the heart's action is the point in question. But I owe my readers an apology for thus holding a candle to the sun and labouring to make clearer what was clear enough before.

I need not again refer to matters of difference with Dr. Reynolds, which have been perhaps sufficiently dealt with in other relations; one is the continuity of the so-called presystolic murmur with the systolic, which I affirm and he denies. I need not again revert to the points on which I chiefly rely. Of these the most convincing to me is the relation of the murmur to the visible and tangible impulse, and the chief question I have put to myself has been whether the bulging and hardening of surface commonly attributed to the systole could be otherwise than systolic. If the contraction of the ventricle is indicated by the impulse, to me at least it is beyond doubt that the murmur is systolic, for it progresses with the movement and stops with it, even in cases where it has begun before the movement is appreciable.

I am, Sirs, yours truly,

Chesterfield-street, Nov. 12th, 1889. W. H. DICKINSON.

*** We have already devoted considerable space to this subject, the discussion of which we think must now cease.—ED. L.

NURSING AT GUY'S HOSPITAL.

To the Editors of THE LANCET.

SIRS,—It is a great pity that Mrs. Acland should have opened up the nursing question at Guy's Hospital, seeing that all are now working together so amicably at that institution. Nothing can be further from the truth than the idle tale fabricated by some interested persons that the medical staff were opposed to an improved system of nursing, and that they were clinging to old methods both effete and full of abuses. So far from this being the case the late treasurer was memorialised a short time before to make alterations, and answered that the funds of the hospital would not allow of it. The opposition between the governors and staff had to do only with the question of discipline, protesting, as the latter did, against the formation of a new and independent department of nursing, whilst maintaining that this should be controlled by the authorities—viz., the governors and medical staff. After continued assertions of legal right on the one side and protestations on the other, the governors proposed (what was already in operation in many other hospitals) the formation of a committee made up of governors and the medical staff, who, in consultation with the matron, should frame rules for the nursing administration of the hospital. The staff assented, including both Dr. Habershon and Mr. Forster, who did not resign until long after this system had been in working order.

I am, Sirs, your obedient servant,

Nov. 12th, 1889. SAMUEL WILKS.

ON THE APPLICATION OF ICE TO THE CHEST IN HÆMOPTYSIS.

To the Editors of THE LANCET.

SIRS,—The whole treatment of hæmorrhage is one of everyday and ever-increasing interest, and that to the physician no less than to the surgeon. Professor Esmarch says: "He only becomes a good operator who has learnt calmly to enter into the struggle with hæmorrhage." The physician, too, I need not say, has to face this struggle, and it is well when he also is calm and ready with tried remedies and approved methods of treatment. Dr. Thorowgood, in your last week's correspondence on this subject, has pointed out the danger of a prolonged application of ice to the chest in cases of hæmoptysis. This point may be said to lie at the root of the whole treatment of hæmorrhage by the application of cold. Like all so-called vaso-motor remedies which act on the calibre of the arterioles, their effect depends entirely on the way in which they are applied. The physiological attitude of all the peripheral bloodvessels is one of rhythmical semi-contraction, and during hæmorrhage, of the kind under consideration, this semi-contraction has given place to paresis, paralysis, or even rupture of their vascular walls. Our remedies then are those which are supposed to constrict those vessels and restore them to their normal condition. What we aim at is to accentuate their physiological state, taking care not to overstep the limit and bring about an opposite condition by over-stimulation.

Of all vaso-constricting remedies cold is perhaps the most immediate, the most decided, and the most perfect, and just in proportion is it likewise the most lethal of all vaso-motor remedies, when not applied on strict physiological principles. The initial constriction of the arterioles caused by the application of cold (say, by ice) is of the nature of a spasm caused by shock, and this spasm very soon passes into paresis and subsequent paralysis, if the application is prolonged for any length of time. Even in the familiar cold bath it is found, according to Leichtenstern, that the peripheral contraction of vessels is greatest at the commencement and remits somewhat in the course of it, and in the case of unusually long duration or of excessive cold of the bath, relaxation of the vessels succeeds their over-stimulation. These statements accentuate the fact that it is the *intermittent*, and not the too *prolonged*, application of cold which should be followed in the treatment of hæmorrhage. This is especially the case in post-partum hæmorrhage. As the outcome of a large obstetric experience, I am led more and more to trust to this simple method in the treatment in these alarming cases. By the intermittent yet not too prolonged application of cold cloths to the vulva, the sacrum, and sometimes the abdomen, such cases, however severe, generally yield in time. The point is to carry the cold application as far as constriction and no further. Beyond this point there is danger, not only of not arresting the flow, by the sudden relaxation of the over-stimulated vessels, but of causing fatal syncope from paralysis of the whole abdominal vascular area. It is wise to remember that the whole column of blood in the body can be held and retained in this same abdominal vascular area. Paralysis of this area simply means fatal traumatic syncope. No blood in the brain, no blood in the heart, but all the abdominal veins gorged with a now useless, non-nutritious, and venous blood.

Even with those remedies (like ergot) which have, in medium doses, the effect of constricting the arterioles, do we not find that, like cold, they cause in large or lethal doses an opposite effect? We do. Yet, in spite of this, I should be disposed to rely on full and frequent doses of this vaso-constrictor in all cases of hæmoptysis in preference to any other mode of treatment, just as I would on the intermittent application of cold in all cases of uterine hæmorrhage. Sudden and alarming hæmorrhage will always be a burning question with everyone, but terribly so to the country practitioner, for then he has to decide at once and for himself what methods of treatment have justified his faith. I am, Sirs, yours obediently,

Rothwell, Northampton, Nov. 5th, 1889. JAMES MORE, M.D.

THE ICE-BAG TREATMENT IN PNEUMONIA.

To the Editors of THE LANCET.

SIRS,—I consider the necessity of writing with considerable diffidence in dissenting from the opinions of so careful an observer and eminent judge of medical treatment as Dr. Lees. I am, however, convinced that the statistics of results as to the ice-bag treatment in pneumonia are fallacious and misleading. I am old enough to remember the time when venesection, tartar emetic, and mercurials were the orthodox modes of treatment for pneumonia. I can also recollect when the treatment by warmth, poultices, and stimulants by ammonia, backed by nutriment, came into use. From a lengthened practice, public and private, in town and country, I have no hesitation in declaring my faith in the last-named mode of treatment. Granted the ice-bag treatment may lower the temperature. Does it not also tend to depress the vital powers and diminish the *vis vitæ* upon which so largely depends the power of fighting through an attack of severe pneumonia? Although not in a position to furnish numerical statistics of cases treated, I can conscientiously assert that since I rejected the old treatment of reduction and adopted that of local warmth, moderate counter-irritation, and nourishment, I cannot recall the loss of one patient (and many were of double pneumonia) in which the result has been fatal where the treatment has been adopted *early*. I should also apprehend considerable risk from the ice treatment in cases where, as is so often the case, pneumonia is engrafted on dilatation of the right cardiac cavities. The marked alleviation of pain, the sense of comfort, and relieved respiration, confirm my belief in the moderate stimulative treatment of acute pneumonia. I am, Sirs, yours truly,

Ealing, November, 1889. S. D. HINE, M.R.C.S.

HOSPITAL OUT-PATIENT REFORM.

To the Editors of THE LANCET.

SIRS,—There are a few points in your editorial article of Nov. 9th which I wish to notice. First, as regards the Manchester system of checking abuse. There are really no diverse statements by those who know what they are speaking of. If any of your readers will send to J. Smith, 6, Queen-street, Albert-square, Manchester, and ask for the last issued report of the Manchester and Salford Provident Society, this will be noticed :—

"The following figures show the percentages year by year of those applicants to the medical charities co-operating with this Association who were found on investigation to be *ineligible* for gratuitous medical relief, and who were in consequence referred to the Branch Provident Dispensaries :

1875	42·32 per cent.	1881	14·48 per cent.
1876	24·50 ,,	1882	13·51 ,,
1877	24·00 ,,	1883	12·12 ,,
1878	19·64 ,,	1884	14·19 ,,
1879	13·61 ,,	1885	13·57" ,,
1880	14·76 ,,		

These are the *official* figures : let who will dispute them. Since 1885 the percentage of abuse has been steadily falling. I called Sir Andrew Clark's attention to his remarks at the Mansion House, and he wrote thanking me for the correction and stating that it would be omitted when the speech was published in pamphlet form. Evidently, I would suggest, someone supplied Sir Andrew Clark with the abuse-rate of a late year. But the fact remains clear, true, and unshaken that in 1875, when the Manchester people began to inquire into hospital abuse, 42·32 of every 100 applicants were found to be ineligible. No one can with truth deny this. It is to be noted that in Manchester relief is refused to any wage earner making over 12*s.* per week, or to any man and wife making over 18*s.* I propose that this should be 20*s.* and 25*s.* per week—a large and generous difference. One regrets to find that, although there are sixteen hospitals and five dispensaries in Manchester, only five hospitals see their way to co-operate with the Provident Society, and also that, although a "wage limit" of 30*s.* was originally fixed as the limit of membership to the Provident Dispensaries, this has been removed, and with the result that abuse is creeping in and discontent is prevailing. Whose fault is this? Why certainly the medical men. Of course most will agree to this; but then, when doctors holding hospital appointments are chided for not coming forward, you say they must not be blamed! It certainly will be strange if medical men show business men they can sink small differences, and combine to bring about the greatest good for the greatest number. I think, rather than have ourselves and our rather queer actions shown up by a Government inquiry, we should set to at once to do what is right, for shown up we shall be by a Royal Commission.

As regards a Public Medical Service, my point is that we must, of necessity, give the industrial classes the means by which they can secure treatment by the *immediate* payment system. Supposing the hospitals agree to turn off, say, 45 per cent. of their out-patients, where are these to go to? They cannot join a provident society, for the chief rule of this is that persons must be members for *at least* four weeks before being eligible for treatment, just as in any other insurance. And I hold that, until we doctors can say to the hospital committees, "we have a scheme which will give perfect treatment to these out-patients whom you will turn away," the hospital committees would act unjustly and cruelly in turning such patients off to the tender mercies of quacks, bogus clubs, prescribing chemists, and unqualified practitioners.

I have all along held that a Public Medical Service is not complete without a provident society as well. This anyone can see by referring to my original paper, a copy of which I will gladly send to any applicant. I should be happy to accept your suggestion that the fact of a working man having been a member of a provident society might give him a prior claim for admission as an in-patient to a hospital. However, the mere fact that he has been ill, and that he is not in receipt of wages amounting to 20*s.* or 25*s.* per week for work, would entitle him to admission. As to securing the help of chemists, my aim is to try to induce them to give up "counter prescribing." I fear, if we do not get their aid and harm is done to them, they will only retaliate by putting an inferior class of medical men into their back

parlours, thus setting up a fierce competition. Besides, I have found that the average cost of each prescription dispensed by a provident society is about 5½*d.*, and for this amount any good chemist will guarantee to give good medicines. But if it be the wish of medical men, *and if they will agree to act in harmony on this point*, I have no objections to their dispensing for themselves, or in having a dispenser at the branch of the service. Naturally the conditions in a country village will vary greatly, so that we must not dispute over details, but settle the main facts.

As to the percentage of abuse, we have the recorded *facts* of THE LANCET Commission of Inquiry into the London Hospitals of October, 1869, the reports of the Charity Organisation Society, that at the London and St. Bartholomew's Hospitals, Manchester, Leicester, and Devonport.

Trusting you will continue to give this vital and important question your valuable help,

I am, Sirs, yours faithfully,

Liverpool, Nov. 1889. ROBERT R. RENTOUL.

A DISCLAIMER: HARNESS'S ELECTROPATHIC BELTS.

To the Editors of THE LANCET.

SIRS,—For some time past the following advertisement has appeared in a large number of newspapers. I believe, from communications I have received both from members of the medical professon and the public, that from the clever way in which the advertisment has been drafted, I am supposed to recommend the use of Harness's electropathic belts. The advertisement is as follows:—

"DEBILITATED CONSTITUTIONS.

"*Reprinted from* 'The Family Doctor.'

"It is extraordinary how many men suffer nowadays both in mind and body from a multitude of ailments resulting simply from weak nerves, consequent upon overwork, worry, and other debilitating causes. Doctors have tried for years past, and are still trying, to find some drug which will cure the distressing symptoms of nervous exhaustion, but the best they have been able to do in this direction up to the present is to afford slight temporary relief in some simple forms of the disease. The Consulting Physician and Electrician at St. Bartholomew's Hospital has, we are glad to say, made a move in the right direction. After finding that physic is practically useless for the relief of nervous sufferers, he writes:—

"'There is no doubt that electricity is one of the most powerful nerve tonics we possess. No agent so quickly restores the depressed condition of the system resulting from illness. In all states of nervous depression, as from long mental strain or overtaxed bodily powers, general galvanism has proved a refreshing and most invigorating tonic.'

"The next point, therefore, to be considered is as to the best method of applying these galvanic currents to the system pleasantly without any discomfort, and for this purpose we cannot do better than strongly recommend all nervous sufferers to wear one of Harness's electropathic belts."

The last paragraph is from "The Family Doctor."

I have never recommended the use of Harness's belts. The quotation from my writings is taken from a paper I read before the British Medical Association at Belfast in 1884. In a subsequent part of the same paper I have said: "The galvanic belts and portable batteries so extensively advertised are not of the slightest use, and are great impositions on the public. If it were possible to pass a weak current of electricity through the body, or any part of the body, for an indefinite time, no doubt great tissue changes would take place. It would be impossible for such a powerful agent—one capable of splitting up all chemical compounds—to be passed through the body without causing great tissue changes. But the skin offers such a resistance to the passage of electricity that the body may almost be said to be insulated. No weak current, such as is produced by these battery-belts, could pass through the skin. If one pole from the battery-belt be applied to the body, and a galvanometer introduced between the body and the other pole, no deflection of the needle can be detected. If the current from these appliances were strong enough to overcome the resistance of the skin, sloughs would in a short time be produced at the points of application of the negative pole. The same objection holds good with regard to the electric brushes; no battery that they can contain could produce a current strong enough to penetrate the skin of the scalp."

As direct reference is made to me in the public press in a way calculated to give a wrong impression of my views, and, in my opinion, to the detriment of the public, I have felt it my duty to ask you to insert this disclaimer.

I am, Sirs, yours truly,

W. E. STEAVENSON, M.D. CANTAB.,
In charge of the Electrical Department at
Nov. 12th, 1889. St. Bartholomew's Hospital.

ST. MUNGO'S COLLEGE, GLASGOW.

To the Editors of THE LANCET.

SIRS,—In concluding this correspondence, I have only to point out that everything I have said, including the remark regarding the difficulty in getting at the facts of the case, has been stated to me by one or more of the half dozen governors with whom I have conversed on the subject. Not one of these gentlemen, accustomed as they are to accurate observation and method, has any recollection of the important business of Aug. 6th having been notified in the circular calling the meeting. I fail to see for what I owe Principal Blackie an apology. He really calls on me to retract, not what I have said, but what several governors have said to me. It is he who should apologise to me for suggesting that I have not spoken in good faith. But I leave it now to the profession to judge, in the light of the whole correspondence, whether the most essential truth lies on the surface of Dr. Blackie's official minute, or beneath the necessarily scanty data which I have been able to collect. In any case, it is safe to say that when the history, especially the secret history, of the origin of St. Mungo's College comes to be written, it will shed a lurid light on one local phase of medical and academic reform.

I am, Sirs, yours faithfully,

Glasgow, Nov. 11th, 1889. J. WALLACE ANDERSON.

AN INSURANCE MEDICAL SOCIETY.

To the Editors of THE LANCET.

SIRS,—The suggestion put forward by Dr. James Edmunds in THE LANCET of Nov. 9th is worthy of support. The idea of organising a Society of Medical Officers of Assurance Companies had also occurred to me, and I discussed the question with some friends, but press of work prevented me at the time from taking any further steps. A large amount of valuable information would be collected if medical officers would report to such a society all cases in which an extra was charged, together with the reasons for doing so, and the value of these reports would be still further enhanced if the results were filled in as the deaths occurred. By this means a more uniform system of imposing extra rates than at present exists would be attained. Very few discussions have taken place in the various societies on questions directly affecting life assurance, and yet there must be many medical examiners who are able to give much valuable advice on some of the knotty points of assurance. Believing that a Society of Medical Officers of Life Assurance Companies would effect a useful purpose, I shall be happy to assist in the foundation of such a society.

I am, Sirs, your obedient servant,

F. DE HAVILLAND HALL,
Wimpole-street, Nov. 9th, 1889. Physician to the Rock Life Office.

DIPHTHERIA, AND SOME OF ITS CONNEXIONS.

To the Editors of THE LANCET.

SIRS,—As it is only at rare intervals that special attention has been drawn to the possibility of disease in domestic animals being a great source of danger to man, perhaps the following case may be interesting to some of your readers.

On Oct. 10th I was called to see a lad aged fifteen years. His mother told me he had been indisposed for some days. On examination I found him feverish; temperature 102·2°; pulse 110, soft and weak. The submaxillary and adjacent glands were tender and enlarged, the tongue dry, and covered with a brown fur. His tonsils, uvula, and pharynx

were swollen, and of a dark-red colour, where not covered with a thick dirty white membrane. The urine contained a slight cloud of albumen. The case being recognised as one of diphtheria, the patient was at once isolated, and placed under treatment, locally of perchloride of mercury, and internally of tincture of iron. He was practically convalescent in eight days. On making inquiries as to the cause, as there was no diphtheria prevalent, I was at first completely at fault. The sanitary arrangements were satisfactory, the milk and water above suspicion. The lad had not been out of the neighbourhood, and with the exception of having sniffed on one occasion some rather odoriferous manure, knew of nothing that would account for his illness. On talking the matter over with his father, he asked me whether it could have been caused by an animal, and he then told me that a pet cat of theirs that had frequently been nursed by his son had about three weeks prior to the lad's attack been very ill for about ten days, that it had lain about, had had attacks of sneezing and coughing (towards the end of which it frequently vomited some thick, white, frothy substance), had had diarrhœa, and had refused its milk and food.

From the above facts, inconclusive as they are (as of course cultivation of the dejecta of the animal and other modes of investigation would have cleared up doubtful points), I do not think the inference unreasonable that the cat in question suffered from some malady closely allied to, if not, diphtheria, and that possibly, if not probably, the patient was infected from that source. If such was the case, it clearly illustrates the close connexion between some diseases in domestic animals and in ourselves, and suggests the necessity in cases of illness in the former of taking in the future effective precautionary measures.

I am, Sirs, yours truly,

November, 1889. E. J. M.

"MEAN DURATION OF LIFE."

To the Editors of THE LANCET.

SIRS,—It seems to me that the mean duration of life in any district in any particular year can signify only one thing, and can be obtained only by the following or a similar process. Find out the number of days every person has lived in the district during the year, add the different numbers together and divide the sum by the number of persons considered. The answer must come out something under 365, for the mean duration of life in one year cannot be as much as a full year. This quantity, besides being very difficult to obtain, would be a very bad means of comparing the states of health of the district in different years, for apart from any decided difference in the general health it would vary so much according as the majority of births and deaths took place at the beginning or end of the year. The average age at death in any year is a far worse test still, for it simply shows whether the year has been advantageous for the young or the old. A year of cold and foggy weather will kill off a large number of old people, but these extra deaths will simply run up the average age at death, and give a roseate hue to the medical report based upon it. No doubt a steady rise in the average death age in a district indicates in a rough way an improvement in the health of the district, but even this is only a qualitative and not a quantitative indication. What process of the mind is implied when this mean age at death is called the mean duration of life for the year, I am at a loss to guess at.

I am, Sirs, yours faithfully,

THOS. GLOVER LYON, M.D. Cantab.

St. James's-street, S.W., November, 1889.

*** Our correspondent suggests a correct but practically impossible method for ascertaining the mean number of days lived in a given district by a population during a year, which would, however, be absolutely useless as a test of sanitary condition, although the aggregate number might be used for calculating the crude death-rate of such population. The fallacy involved by miscalling the "mean age at death" the "mean duration of life" is clearly pointed out. No reference is, however, made to the true meaning of the term "mean duration of life," as accepted by actuaries and vital statisticians, which was briefly referred to in the annotation published in our issue of the 26th ult.—ED. L.

ON THE SYMPTOM OF PAIN IN SLOW INTRA-PERICARDIAL HÆMORRHAGE.

To the Editors of THE LANCET.

SIRS,—Dr. Naismith, in his very interesting article on the above subject in THE LANCET of the 9th inst., makes reference to a case of ruptured left ventricle published by me in a contemporary of April 6th, and states that the patient in that case is reported by me to have complained of pain at the præcardia only, "and had, therefore, deductively, no abdominal pain at all." May I be allowed just to state that the inference so drawn by Dr. Naismith is quite correct, and that præcordial pain alone was present? The case reported by Dr. Naismith seems to my mind to show the great importance of post-mortem examinations being made more frequently in cases where diagnosis has been difficult or doubtful, and in *all* cases where death has been sudden or unaccountable.

I am, Sirs, yours truly,

Kendal, Nov. 9th, 1889. SAMUEL CLARKE NOBLE.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Newcastle Hospital Sunday.

THE Hospital Sunday Fund, so far as has been made public, shows some very substantial increases over the collections of last year. On Sunday last, the Mayor and corporation, in accordance with an old custon, attended service at the cathedral, when a collection amounting to £150 was taken; this is about £22 in excess of last year. The first collections of the Hospital Saturday have also been made, and show, as might have been expected from the prosperous condition of trade on Tyneside, a marked improvement over last year's.—The question of out-patients came up on Thursday last at the quarterly meeting of the governors of the Royal Infirmary. One party of the governors were in favour of re-establishing the out-door department, and in this they had the support of the medical staff. Another party which may be called the financial party, opposed this on the score of expense, even although a charge of 3*d.* per bottle was made for the medicine, as proposed by the "out-door party." The strongest opposition came from the working men's governors, who opposed the project *in toto*, contending that, as the hospital was called a free one, it should be really so, and as the working men were now regular contributors, it would be unfair to make any charge for medicine. The whole matter was felt to be too large for settlement by a quarterly court, so it was prudently shelved for the annual court of governors to be held in February next.

Durham County Lunatic Asylum.

The Commissioners in Lunacy have sent in a report to the Durham County Council, in which it stated that the numbers in the asylum on July 24th were 1071. Besides the numbers above stated at Sedgefield, 204 Durham lunatics were boarded out. The Commissioners state that there had been no restraint and no seclusion. Having a strong staff, Dr. Smith objected to the provision of padded rooms. The Commissioners had agreed that the further extension of this asylum should not be undertaken under any circumstances.

Doncaster.

Mr. Adams, who was assistant to the late Mr. Storrs, surgeon, has just died after a week's illness under very sad circumstances. Mr. Storrs died a week ago from pneumonia, said to have been contracted from a patient whom he had attended. The day following Mr. Storrs' death, Mr. Adams was prostrated also by pneumonia, and succumbed, as above stated. He was only thirty years of age.

South Shields.

A case of poisoning by phosphorus took place at South Shields on the 2nd inst. It appeared that a woman made an infusion of ten boxes of matches, which she drank. She was attended by Dr. Bootiman, whose evidence as to the effects of phosphorus was very clear, showing she suffered great agony for five days. It is to be hoped that Dr. Bootiman's evidence elicited by the coroner will make it well known that this mode of suicide is

about as dreadful a one as could be devised. Poisoning by lucifer matches is easy to effect, and has of late become rather popular in the north. In Newcastle a few months ago there was quite an epidemic of match-poisoning, if such a craze can be termed an epidemic.

Newcastle-on-Tyne, Nov. 13th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

EDINBURGH.

The Arran Murder.

IN Edinburgh the great topic of conversation for the last few days has been the Arran murder case. The case is interesting from a medico-legal point of view, as the evidence offered by medical experts has been extremely conflicting and contradictory in respect to the interpretation to be put on the injuries found on the murdered man. For the prosecution, Drs. Gilmour, Fullerton, and Littlejohn were strongly of opinion that the fractures and bruises could best be accounted for on the supposition that the injuries on the face had been caused by blows inflicted, in part at any rate, whilst the body was lying on its back, and they contended that it was quite impossible that a single fall from a height could inflict so much damage as was found to the head and face. The dislodgment of the upper jaw could scarcely be brought about except as the result of blows with some heavy instrument. These facts, together with the absence of injuries on the extremities, were, they contended, against the theory of death by accidental fall. The rebutting medical evidence by Drs. Watson, MacGillivray, and Thomson was to the effect that repeated blows would not produce a continuous fissure in the skull; and Dr. Watson, in speaking of the condition in which the upper jaw was found—i.e., displaced downwards,—said that he had seen such a condition produced by a fall; and the other witnesses for the defence thought that the injuries described might be produced by either a fall or a series of blows. A strong feeling has been raised in Laurie's favour, and it is probable that most strenuous efforts will be made to obtain a reprieve, especially as the jury was by no means unanimous in its finding.

Edinburgh Health Lectures.

The Lord Provost, presiding at the first of the tenth series of health lectures given under the auspices of the Edinburgh Health Society, defined very succinctly the object and scope of these lectures, but he also pointed out to those who considered that a little knowledge was a dangerous thing that the best things were dangerous when misapplied. It depended entirely upon the use made of the knowledge. It was the people who knew nothing who feared nothing, and those who had some knowledge were at any rate in a position to take some precautions. Dr. Macdonald Brown, the lecturer, took for his subject "Man: a machine," and gave an interesting and popular sketch of the anatomy and physiology of the human body. He did this, he said, because he believed that the consideration of man, viewed in the light of an intricate machine, might not only aid them in understanding better the other lectures of the course, but might also invest with a fresh interest the little phenomena connected with their daily life. A most varied and instructive series of lectures is advertised, and if the attendance at the first lecture is to be taken as any criterion the financial success of the series is assured.

Edinburgh, Nov. 12th.

ABERDEEN.

The new Professor of Anatomy.

On Friday last, Dr. Struthers, who carried on the work of the Anatomy department from the date of the acceptance of his resignation to the appointment of his successor, offered his final farewell to the students. On Saturday his successor, Dr. Reid, late of St. Thomas's Hospital, London, was, at a meeting of the Senatus, formally inducted to the chair of Anatomy. Yesterday Professor Reid delivered his introductory lecture, and received a hearty welcome from an immense concourse of students who crowded the anatomical theatre. Many of the professors were present, and along with them was Dr. Farquharson, M.P. In introducing the new Professor of Anatomy, Professor Geddes said: "One's thoughts naturally revert to the many and important changes that have taken place in the Aberdeen professoriate. Of all the professors under whom Dr. Reid studied when a student here, not one is now attached to the staff of the University. Among the changes that have taken place none has been more regretted or more unexpected than the retirement of Dr. Struthers from the chair of Anatomy. By his retirement the University has sustained a great loss, the loss of a most influential and energetic professor. To him the thanks of the Senatus are due for the admirable manner in which he conducted the classes since the opening of the session, in a way showing his loyalty and duty to the University." Referring to Dr. Reid, he said: "He is no stranger to us. ..... He is a native of the county, and he has his name inscribed in the University of Aberdeen as one of our distinguished students with honours of recent years. But if anything could commend him to your favourable notice, it is the circumstance that he comes to us with unique experience. In the first place as having been Demonstrator of Anatomy under Dr. Struthers, as Assistant Professor under the same, as examiner in this University in the department of Anatomy, and finally, as having been the lecturer for a long period of years in one of the most important medical colleges in the country, St. Thomas's Hospital of London. With such credentials no one could come before us more highly recommended." Professor Reid said that he had received official intimation of his appointment only that day week, and in the midst of somewhat hurried arrangements to leave his former school came an intimation from the Dean of the Faculty that he was expected to deliver his introductory lecture on Nov. 11th. He was sure, therefore, the students would pardon his not troubling them with a long discourse. He first spoke of the changes that had taken place in the University since he acted as Demonstrator of Anatomy in the year 1872-73. Referring to the anatomical rooms, he said, "when I compare them with those of my time (1872-73) I am filled with admiration and wonder, and cannot but express deep gratitude and obligation, which I am sure is shared by all well-wishers of the University, to the ability and untiring energy of the Emeritus Professor. He informs me that he leaves to this Anatomical School his beautiful collection of specimens illustrating anatomy in all its aspects. I trust that we may prove worthy custodians of the same." Professor Reid then proceeded to trace the origin and progress of the science of anatomy. As to the methods of teaching and acquiring a knowledge of anatomy, he said: "Our University provides (1) systematic lectures and (2) practical teaching. As to lectures, it may be that I am still somewhat imbued with the spirit that pervades most of the London schools, and thereby rather prejudiced, but I think a little too much importance is paid to the acquisition of knowledge in this way. ..... As far as my experience goes of both the Scotch and the London teaching of anatomy, I think that a happy medium between the two is the aim to strive for—i.e., the combining the somewhat more theoretical Scotch with the somewhat more practical English." The remaining part of the address was taken up with an account of recent advances made in anatomical knowledge which have led to a few of the late rapid strides in the art of surgery. The surgery of the nervous system was taken as a striking example; cranio-cerebral topography was described, and it was pointed out how by its aid surgeons now ventured to perform some of the most daring operations which have been practised in modern times. Referring to the treatment of locomotor ataxy by suspension, Professor Reid said he was always sceptical as to the *rationale* of this treatment from an anatomical point of view. Recent experiments on the dead body by Dr. Sherrington and himself tended to confirm his original idea, and his "non-belief in this form of treatment, from an anatomical point of view, seems to be almost conclusively confirmed clinically" by the experience of Dr. Taylor, of the Hospital for Paralysis and Epilepsy in London.

Health of the City.

During the past week the following cases of zymotic diseases were reported: Measles, 3; diphtheria, 2; typhoid fever, 9; and whooping-cough, 3.

Aberdeen, Nov. 12th.

ST. GEORGE'S HOSPITAL. — The £65 Entrance Scholarship, open to students from the Universities of Oxford and Cambridge, has been awarded to Mr. Harold Bain Grimsdale, of Caius College, Cambridge.

DUBLIN.

(FROM OUR OWN CORRESPONDENT.)

Royal College of Surgeons in Ireland.

A MEETING of the Council was held on the 7th inst., when an election to three professorships took place. Mr. Heuston was appointed Professor of Anatomy; Mr. J. A. Scott, Professor of Physiology; and Mr. Myles, Professor of Pathology. There was no question that Messrs. Heuston and Scott would be severally elected for their respective chairs; the only uncertainty that existed was in reference to the chair of Pathology. The contest here was a very close one, the voting being—Mr. Myles, 10; Dr. McKee, 9.

The McDonnell Memorial.

At a meeting of the professional friends of the late Dr. Robert McDonnell, held in the Royal College of Surgeons in Ireland, at Dublin, on Tuesday, the 5th inst., a general committee of eighty-two prominent members of the medical profession was appointed, with power to add to its number, and it was resolved that the most fitting form the proposed memorial could take would be a marble bust and an oil painting, to be placed in the Royal College of Surgeons, Dublin. It was also resolved to invite the co-operation of all those members of the medical profession who knew and esteemed a past president whose career shed such a lustre on his profession and on his College. Additional names to be placed on the committee and subscriptions (limited to one guinea) will be received by the hon. treasurer, Sir J. T. Banks, K.C.B., 45, Merrion-square East, Dublin, or by the hon. secretary, Dr. Anthony H. Corley, 16, Merrion-square North, Dublin.

Royal Academy of Medicine of Ireland.

Mr. Austin Meldon, President of the Royal College of Surgeons in Ireland, delivered the inaugural address of the Surgical session of the Academy on Friday evening, Nov. 8th, in the Albert Hall of the College. The speaker, having alluded in eulogistic terms to the late Dr. Robert McDonnell, F.R.S., past president of the College and Academy, dwelt at considerable length on almost every branch of surgery, illustrated by cases coming under his care during the past quarter of a century in Jervis-street Hospital. The address was listened to with marked attention by a crowded audience of the profession. The President afterwards entertained nearly two hundred guests, both branches of the profession being well represented.

Typhoid Fever in Dublin.

There has been for some time past numerous cases of typhoid fever in Dublin and suburbs, the cause or causes for which it is difficult to explain in a satisfactory manner. During the quarter ended Sept. 28th, I find that the mortality in Dublin from typhoid amounted to forty-one, or eleven over the average for the preceding three months; while the number of cases admitted to hospital were 176, as against 127, of whom sixteen died. A correspondence has recently taken place in one of the papers as to the probability of typhoid fever in some instances being due to eating oysters, but I am inclined to believe that it depends mainly, should the suggestion be correct, upon the locality from which the oysters are obtained. It certainly may be that the illness which so many persons have experienced after swallowing oysters, believed to have been stale, was really due to the presence of sewage matter in the juice of the molluscs.

Hospital Sunday Fund.

Last year 259 congregations joined in the movement, as contrasted with 149 when the Fund was first started in 1874. As last Sunday was a very fine day, it is believed that the collections this year will not show any falling off as compared with previous years, but necessarily the returns will not be obtained for some time.

The hospital football match, now a recognised institution, took place on Saturday last, and was very successful, a sum of over £74 gate-money having been received, which is the highest amount ever obtained from that source.

The present master of the Coombe Lying-in Hospital will vacate his office in December of next year, and not this year, as currently reported, as his seven years' tenure of office will not be completed until that date.

Mr. Paul Dillon has been appointed extern physician to St. Vincent's Hospital, Dublin.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The French Surgical Congress.

THE "Treatment of Aneurysms of the Limbs" was the last of the most important subjects which occupied the attention of the Congress. M. Kirmisson opened the discussion by recounting the history of four cases which he had recently treated. In one, which belonged to the diffuse variety, he ligatured with perfect success the femoral artery. The other three were of the spontaneous kind. The first of these was a man thirty-eight years of age, with aortic insufficiency and a rheumatic, if not a syphilitic taint. Reid's method, digital and instrumental compression, were essayed in turn without success. At last the aneurysm, which was situated in the upper portion of the femoral, was completely subdued by the ligature of the external iliac artery. The ligature applied consisted of a large catgut. His second case was that of a woman fifty-six years old who presented a well-marked popliteal aneurysm. She also was the subject of aortic disease. Reid's plan was first tried for half an hour without further result than the production of extreme pain. Digital compression brought about some considerable diminution of the pulsations, but in the course of this practice it was ascertained that complete extension of the limb caused total suspension of the pulsations, whereupon this position was maintained by the application of a back splint, with the result that the patient was cured. His third case was also one of popliteal locality. He was a man sixty-four years old, with atheromatous vessels and a clearly marked syphilitic history. Compression was first tried, but as the sac threatened to rupture the femoral was ligatured. Inflammation of the sac unfortunately supervened, and the patient ultimately succumbed to gangrene and septicæmia. In conclusion, the speaker remarked that it was necessary to recollect that aneurysms were not dilatations of the vessels simply. These were secondary lesions, of which alcoholism, rheumatism, and syphilis were the chief originators. On the whole, the method of treatment which seemed to him best was the antiseptic ligature. The various methods of compression might of course be tried without prejudice.—M. Vaslin of Angers was not an advocate of the compression methods, which had always failed in his hands. In aneurysms of the lower limbs he believed the best remedy was the catgut ligature placed rather at a distance from than near to the tumour. But for aneurysms of the upper extremity he preferred extirpation.—M. Trélat of Paris remarked that aneurysms were relatively rare in France. As to the question of their treatment, it was evident that the tendency to-day was to go back to the old methods; indeed, it might be said that the contest for favour lay around two principal methods—viz., ligature at a distance and extirpation. Amongst the advocates of the ligature were to be found such eminent surgeons as Lister, Bœckel, and Lucas-Championnière, who maintain that since the ligature has become aseptic it is excellent. But in the therapeutics of aneurysms it is not only a question of the immediate issue of the operation; there is, besides, the profound disturbance of the circulation caused by the forced and abrupt disuse of a part of the main vessel, which part is considerable when the ligature is applied at a distance from the tumour. Cauchois of Rouen supplies us with a telling example of the risks since he describes a case in which, eight months after ligature, inflammation was set up in the sac, necessitating amputation of the limb. Delbet cites other examples. It is true that the ligature gives 60 per cent. of success, but there remain 40 per cent. in which it fails, and it is on account of this non-success in a proportion so remarkable that M. Trélat believes the future belongs to the extirpation method, which, while it has the merit of reducing to a minimum, the segment of disused artery is beyond danger of being followed by the subsequent complications known under the name of inflammation of the sac.—M. Guillet of Caen said he had recently to treat an aneurysm of the femoral in the region of Hunter's canal in a man seventy years of age. Digital compression was first tried and appeared to give satisfactory promise, but two months later the tumour and pulsations reappeared. His patient being hardly a subject for extirpation, he ligatured the vessel above the sac. Three weeks later, the patient having died of intercurrent cerebral troubles, it was found at the post-mortem examination that no appreciable modification of the sac or

its contents had followed the ligature.—M. Mollière of Lyons supported the views of M. Trélat in favour of extirpation. For some years he had almost invariably adopted this method of procedure in voluminous aneurysms. He spoke favourably, by comparison, of this operation, for he had seen digital compression followed by gangrene of the toes, and again by suppuration of the sac and septicæmia.—M. Reclus was strongly opposed to compression and other such non-operative measures, and maintained they should be definitely discarded, and for several reasons. They gave rise to much unnecessary pain in their application. Moreover, they did not attain the object sought after; in one out of every two aneurysms they failed. But, most important of all, they were dangerous, not only as to their immediate consequences, but because they placed the vessels in the worst position for resisting the shock of the ultimate operation for ligature. Delbet records that amongst twenty cases of aneurysm of the popliteal treated by preliminary compression gangrene supervened in three. As to extirpation compared with ligature, he (the speaker) would hold to the ligature, for the operation was simple and the results generally good. Extirpation, he thought, should be reserved for exceptional cases.—M. Verneuil said that twenty years ago he was a strong partisan of non-operative methods. Although he believed they had had their day, he could not consent to their absolute proscription, for he believed they were still indicated in certain cases. After the age of seventy, especially, operations on the arteries were so discouraging that he thought we were hardly justified in having recourse to them. He considered the aseptic ligature excellent, whereas extirpation seemed to him a very difficult proceeding and beyond the reach of a great number of practitioners. Of course, the discussion being limited to the consideration of aneurysms of the limbs, he did not include in these remarks aneurysm of the trunk, in which the milder methods of procedure found their most successful application.—M. Peyrot of Paris brought to the debate the details of a case in which he had practised extirpation. It was a popliteal aneurysm in a woman fifty years old. She had a history of rheumatism, scarlatina, malarial fever, with liver troubles, and five pregnancies. In consequence of the thinness of the wall of the sac he rejected compression, which he feared might favour gangrene, and decided to perform extirpation. The operation was long and laborious. The popliteal vein was closely adherent to the sac, and after a prolonged attempt to separate it he desisted and proceeded to dissect out the tumour from below upwards. The subsequent progress of the case was marked by the threatened appearance of gangrene near the heel and great toe, but it came to nothing. For a time flexion of the limb was difficult, but it is now accomplished normally. He did not wish to generalise from this single case, but, while allowing ligature to be desirable in certain cases, he nevertheless believed that extirpation would be found to give the best results on the whole. It must be remembered that ligature did not avert so completely the risks of subsequent inflammation and gangrene of the sac, not to mention gangrene in a part of the limb at a distance from the tumour, and the fear of a return of the latter.—M. Dudon of Bordeaux defended the ligature. It had given excellent results in cases where milder procedures completely failed. It was not necessary to have recourse to extirpation as a rule, and he did not hesitate to say he found the ligature more easy of application, as well as more benign in the sequel.

A French Hospital in Constantinople.

At a Cabinet Council held in Paris on the 12th inst. it was decided to submit to the Council of State a decree authorising the Government to appropriate out of the legacies left to the State the sum of 4,000,000 francs for the erection of a French hospital in Constantinople.

Paris, Nov. 13th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

A New Edition of Virchow's "Cellular Pathology."

IT is said that Professor Virchow is rewriting parts of his "Cellular Pathology." The fourth and last edition appeared in 1872, and is now partly antiquated. Some of its theories have been refuted by some of Virchow's own pupils—e.g, the theory of the nature of inflammation by the late Professor Cohnheim of Leipsic. It is said that the new edition will appear next August, as a festal gift to the International Medical Congress, which will then be sitting.

Dr. Cornet's Writings on Consumption.

The Prussian Minister of Religious, Educational, and Medical Affairs has conceived so high an opinion of the writings of Dr. Georg Cornet on consumption that he has ordered a large number of copies to be bought and sent to official and other quarters where he thinks them specially worthy of attention. The titles of the publications thus distinguished are: "The Death-rate in the Orders for the Care of the Sick," "The Propagation of Tubercle Bacilli outside of the Body," and "How to protect oneself against Consumption." It may be necessary to explain that the "Orders for the Care of the Sick" are Sisters of Mercy and the like.

The so-called Fish-scale Disease.

In the Royal Hospital for Women here, Professor Olshausen recently showed to his numerous hearers a newly-born child affected by an extremely rare and remarkable disease. The whole white epidermis was thickened into scales, and marked all over with broad red stripes, due to congenital fissures. When one stroked the skin with the palm of the hand, a rough sound was produced; and if scratched, it peeled off in scales like the skin of a fish. This rare affection has been called the "fish-scale disease," but the well-known Berlin dermatologist, Dr. Lassar, who has examined the skin of the child in question histologically and with the microscope, objects to this designation. The boy has eyelids and eyelashes, but no eyes. He is the third monstrosity of the kind to whom his mother has given birth. One of them is preserved in the hospital collection in spirits of wine, the other in a faithful portrait. Several of the children of the same mother are free from the disease, and are still living. The causes are as yet unknown. Heredity is provable in many cases. There was once a woman in Vienna whose five sons were all affected by this disease, while her three daughters were not. Sometimes it spares one generation and reappears in the next or in a side-line. In the last century the Lambert family (a father and two sons), who suffered from this disease, gained a kind of celebrity by exhibiting themselves as "Cruxts" or "porcupine men," and were described and drawn by two physicians.

Berlin, Nov. 12th.

THE SERVICES.

ARMY MEDICAL STAFF.—Brigade Surgeon John Robinson has been granted retired pay (dated Nov. 4th, 1889).

ARMY MEDICAL RESERVE OF OFFICERS.—Surgeon Edwd. Luke Freer, 1st Volunteer Battalion, the Royal Warwickshire Regiment, to be Surgeon, ranking as Captain (dated Nov. 13th, 1889); Acting Surgeon Alfred George Bateman, M.B., 16th Middlesex Rifle Volunteer Corps, to be Surgeon, ranking as Captain (dated Nov. 13th, 1889).

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon James Flanagan has been placed on the Retired List, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets (dated Nov. 7th, 1889).

RIFLE VOLUNTEER CORPS.—1st Volunteer Battalion, the Lincolnshire Regiment: Thomas William Jas. Allen, Gent., to be Acting Surgeon (dated Nov. 9th, 1889).—16th Middlesex (London Irish): Acting Surgeon A.G. Bateman, M.B., to be Surgeon (dated Nov. 9th, 1889).

The death is announced, at Southsea, of Fleet Surgeon Thomas George Wilson, L.M. and F.R.C.S. Irel., at the age of fifty-three years. The deceased, who was Deputy Inspector-General of Hospitals and Fleets, left his residence on the afternoon of the 7th inst., on his tricycle, leaving word that he would return in time for his dinner at 7 o'clock. Subsequently his lifeless body was found lying in the Merton-road. Surgeon Wilson entered the Naval Medical Service in August, 1857, and was Fleet Surgeon of H.M.S. *Inconstant* during the Egyptian War, 1882, for which he gained the Egyptian medal and the Khedive's bronze star.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council of the College held on Thursday, the 14th inst., the minutes of the Quarterly Council held on Oct. 17th were read and confirmed.

The minutes of the Board of Examiners in Dental Surgery of the 6th inst., on the report from the board, were read. These involved considerable alterations in the curriculum for the diploma, and we print them at p. 1028.

The following report from the Committee of Management of the two Colleges was read, approved, and entered on the minutes:—

"Having in compliance with the request of the Council of the Royal College of Surgeons considered whether it is desirable that any alterations should be made in Clause 9, Paragraph II., Section I., of the Regulations of the Examining Board in England, relating to the discharge of the duties of medical clinical clerk and of surgical dresser, and being of opinion that it is desirable that those duties should in each case be discharged in the wards during not less than three months, the Committee recommend the two Colleges to add the following words to Clause 9, Paragraph II., Section I., of the Regulations:—'of which in each case not less than three months shall have been in the wards'; so that the clause may read as follows—viz.: '9. Of having discharged, after having passed the second examination, the duties of a medical clinical clerk during six months, and of a surgical dresser during other six months, of which in each case not less than three months shall have been in the wards.'"

The Committee have also to recommend the insertion of the words "and diseases peculiar to women" after the word "midwifery" in the tenth line, and the omission of the word "practical" in the twelfth line of Paragraph XIX., Section II., of the Regulations, so that the paragraph will read as follows—viz.:

"XIX. A candidate referred on the third or final examination, or on one or more of the three parts into which he may have divided it, will not be admitted to re-examination until after the lapse of a period of not less than three months from the date of rejection, and will be required, before being admitted to re-examination, to produce a certificate, in regard to medicine and surgery, of having attended the medical and surgical practice, or the medical or surgical practice, as the case may be, at a recognised hospital during the period of his reference; and, in regard to midwifery and diseases peculiar to women, a certificate of having received, subsequently to the date of his reference, not less than three months' instruction in that subject by a recognised teacher." These alterations are to take effect from January, 1890.

The President reported the result of the meeting of Fellows and Members on the 7th inst., and the resolution carried at the meeting was read and entered on the minutes.

A letter with the contained resolutions was read, dated the 25th ult., from Mr. Francis Fowke, general secretary of the British Medical Association, reporting resolutions carried by that Association in reference to the constitution of the College.

A letter of the 11th inst., from Mr. Wilde, was read, stating that the plaintiffs in the action, Steele *v.* Savory, had obtained an extension of time, which would have expired on the 15th inst., for the delivery of their statement of claim.

A letter was read from Dr. Liveing reporting the proceedings of the Royal College of Physicians in reference to matters concerning the two Colleges.

The President reported that there would be three vacancies in the Court of Examiners occasioned by the expiration of the term of office, on Dec. 11th next, of Mr. J. W. Hulke, Mr. J. Langton, and Mr. T. P. Pick; that there would be two vacancies in the Court of Examiners' section of the Board of Examiners in Dental Surgery occasioned by the cessation of office on the court of Mr. Hulke and Mr. Langton; and that the vacancies thus occasioned will be filled up at the ordinary meeting of the Council on Dec. 12th next. It is generally understood that Mr. Hulke will not offer himself for re-election.

Medical News.

[ROYAL COLLEGE OF PHYSICIANS OF LONDON.—In the list published on the 2nd inst., "Knox, Jas. K.," should read Knox, Jas. Jenkinson.]

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the necessary examinations, were at an ordinary meeting of the Council on the 14th inst. admitted Members of the College:—

Barker, John Hamer, L.R.C.P.Lond., Blackburn-rd., Manchester.
Bates, Stephen Henry, L.R.C.P.Lond., Univ. College Hospital.
Bentham, Andrew O., L.R.C.P.Lond., High-st., Standish, Wigan.
Bergin, George Fredk., L.R.C.P.Lond., West-pk., Clifton, Bristol.
Bevan, Tom W., L.R.C.P.Lond., Trefilan Rectory, Talsarn, R.S.O.
Beyts, Wm. George, L.R.C.P.Lond., Sunderland-road, Forest-hill.
Boase, Wm. George, L.R.C.P.Lond., Mannamead, Plymouth.
Bradbury, Arnold F., M.D.Durham, Regent's-place, Halifax.
Brohier, Louis Cyrus, L.M. & S.Ceylon, Torrington-square.
Burton, Harry, L.S.A., Marple-bridge, Stockport.
Cameron, Ewan Gordon, L.R.C.P.Lond., Wyndham-place.
Carrell, George N. Piccaver, L.R.C.P.Lond., Forest-hill-road.
Cato, Alex. McLean, L.R.C.P.Lond., Vambery, Norbury, Surrey.
Cayley, Cyril Henry, L.R.C.P.Lond., Elm-grove, Watford.
Cheetham, Sydney Wm., L.R.C.P.Lond., Grosvenor-ter., Bootle.
Cleveland, Robert A., L.R.C.P.Lond., Shrover Hall, Cosham.
Collett, Henry G. O., L.R.C.P.Lond., Randolph-gardens, Dover.
Collins, Algernon B., L.R.C.P.Lond., Hawthorn Lodge, Yapton.
Conway, Basil W., L.R.C.P.Lond, Belgrave-place, Stalybridge.
Cooke, John A., L.R.C.P.Lond., Trafalgar-sq., Ashton-under-Lyne.
Cuthbert, Henry Pierce, L.R.C.P.Lond., Clun, Shropshire.
Dewhurst, John H., L.R.C.P.Lond., Whin Field, Skipton, Yorks.
Dickson, Thos. H., L.R.C.P.Lond., Belvedere-road, Norwood.
Dowse, Henry E., L.R.C.P.Lond., Brisbane, Petersfield.
Duigan, William, L.R.C.P.Lond., Bernard-street.
Edmonds, George, L.R.C.P.Lond., Park Lodge, Bexhill.
Edwards, John H., L.R.C.P.Lond., Great Percy-street.
Elam, George, L.R.C.P.Lond., Harley-street.
Elliot, Robt. Henry, L.R.C.P.Lond., Green-lanes, Finsbury-park.
Enraght, Wm., L.R.C.P.Lond., St. Gabriel's Vicarage, S. Bromley.
Evans, Ernest William, L.S.A., Highbury-terrace.
Evans, Thos. Henry F., L.R.C.P.Lond., Highbury-terrace.
Findlay, Harry, M.B.Glasgow, Glasgow-street, Glasgow.
George, Alfred Walter, L.R.C.P.Lond., Regent-rd., Gt. Yarmouth.
Gibbs, Seymour F., L.R.C.P.Lond., Abercorn Lodge, Mill-hill.
Giffard, Gerald Godfrey, L.R.C.P.Lond., Southwell-gardens.
Glinn, Geo. Frederick, L.R.C.P.Lond., Stoke-terrace, Devonport.
Godding, James, L.R.C.P.Lond., Kingsclere Villa, Southsea.
Heath, Alan Jasper, L.R.C.P.Lond., Cavendish-square.
Hickley, Arthur Mackenzie, L.R.C.P.Lond., Edgware-road.
Higginson, John W., L.R.C.P.Lond., Thornleigh, Stoneygate.
Hooton, W. A., L.R.C.P.Lond., Kersal Towers, Higher Broughton.
Horton, Algernon John, L.S.A., High-street, Bromsgrove.
Hues, Frank, L.S.A., Soho-road, Handsworth.
Hughes, Alfred Edward P., L.R.C.P.Lond., Holy Trinity Vicarage, Darlington.
Hugo, Edwd. V., L.R.C.P.Lond., Bridge Avenue, Hammersmith.
Keibe, Walter Edward, L.R.C.P.Lond., Falmouth-road.
Khan, Masha Allah, L.R.C.P.Lond., Bromley-street, Stepney.
Kitchin, Henry B., L.R.C.P.Lond., Crescent House, Mornington-pl.
Knox, Jas. J., L.R.C.P.Lond., Church House, Bakewell.
Lewis, Llewelyn, L.R.C.P.Lond., Southfield, Neath.
Ley, Geo., L.R.C.P.Lond., Gratton-road, West Kensington-park.
Lightbody, John H., L.R.C.P.Lond., Greenbank Drive, Liverpool.
Livsey, Wm. Edwd., L.R.C.P.Lond., Carisbrook-road, Liverpool.
Lord, Robt. E., M.B.Vict. (Manch.), Rotunda Hospital, Dublin.
Lourensz, Chas. Ball, L.M.S. Ceylon, Torrington-square.
Major, Arthur Cundell, L.R.C.P.Lond., Hungerford, Berkshire.
Mallard, Frank Reginald, L.S.A., Cripplegate, Horsham.
Manning, Harry Paul Owen, L.R.C.P.Lond., Falmouth-road.
Mansbridge, Josiah, L.R.C.P.Lond., Cornwall-road, Bayswater.
Martin, Albert Edward, L.R.C.P.Lond., Southborough-road.
Meerwald, Osmond Spencer, L.M.S. Ceylon, Alfred-place.
Meyers, Donald Campbell, L.R.C.P.Lond., Scott-street, Toronto.
Milner, Arthur Samuel, L.R.C.P.Lond., Hackney-road.
Morris, Graham, L.R.C.P.Lond., Hayes, Kent.
Naylor, Joseph, L.R.C.P.Lond., Lordship-park.
Niell, Balfour, L.R.C.P.Lond., Rockport, Craigarad, Belfast.
Nolan, Joseph Adam, L.R.C.P.Edin., Oxford-street, Edinburgh.
Norburn, Albert Edward, L.R.C.P.Lond., Cazenove-road.
Norton, Everitt Edward, L.R.C.P.Lond., Highbury-hill.
O'Leary, Arthur P. Evelyn, L.R.C.P.Lond., Redland-grove, Clifton.
Olive, Eustace John Parke, L.R.C.P.Lond., Stroud-green.
Ormerod, H. L., L.R.C.P.Lond., Westbury-upon-Trym, Bristol.
Osborne, O., L.R.C.P.Lond., Sylva-road, Snaresbrook, Essex.
Paget, Peter, L.R.C.P.Lond., Croombe-road, Croydon.
Paul, Maurice Eden, L.R.C.P.Lond., Brunswick-buildings.
Pires, George, L.R.C.P.Lond., Bedford-place.
Pollock, Chas. Stewart, L.R.C.P.Lond., The Croft, Putney.
Powers, Charles Henry, L.R.C.P.Lond., Atherstone, Warwickshire.
Purnell, Purnell, L.R.C.P.Lond., Woodlands, Streatham-hill.
Rayne, William Theodore, L.R.C.P.Lond., Belgrave-road.
Rees, John Milsom, L.R.C.P.Lond., Penydre House, Neath.
Rendel, Arthur Bowen, L.R.C.P.Lond., Lancaster-gate.
Richardson, William, M.B.Edin., Union Mills, Isle of Man.
Rudyard, Henry A., L.R.C.P.Lond., St. Albans-road, Watford.
Saunders, Fred. W., L.R.C.P.Lond., Hendingham House, Clapham-common.
Shepherd, H. B., L.R.C.P.Lond., Kirkby Lonsdale, Westmoreland.
Simmons, F. H., L.R.C.P.Lond., Sutherland-avenue.
Simpson, Godfrey W., L.R.C.P.Lond, Vincent-square.
Smith, Henry W., L.R.C.P.Lond., Hamstead-road, Birmingham.

Speechly, Harry M., L.R.C.P.Lond., Railton-road.
Stabb, Arthur Francis, L.R.C.P.Lond., Vincent-square.
Standage, Robert F., L.R.C.P.Lond., Holland-road, Kensington.
Stokes, William George Gabriel, L.R.C.P.Lond., Fentiman-road.
Sullivan, Edward Henry Charles, L.R.C.P.Lond., Fentiman-road.
Taylor, Ernest Edmund, L.R.C.P.Lond., Cemetery-road, Sheffield.
Tindall, Ernest Edward P., L.R.C.P.Lond., Hillside-villa, Redhill.
Toller, Seymour Graves, L.R.C.P.Lond., Royal Crescent.
Tuppen, Harry Stacey, L.R.C.P.Lond., Tregunter-road.
Walker, T. Greaves, L.S.A., Groombridge-road, South Hackney.
Walters, A. P., L.R.C.P. Lond., Waterden-crescent, Guildford.
Warde, Wilfred Brougham, L.R.C.P. Lond., Woburn-square.
Watkins, H. E., L.R.C.P. Lond., Stoke Legh, Newton-le-Willows.
Whitman, Royal, M.D. Harvard, Boston, U.S.A.
Wightman, H. T., L.R.C.P. Lond., Clark-grove-road, Sheffield.
Williams, E. McKenzie, L.R.C.P. Lond., Cavendish-place, Bath.
Williams, Ernest G. H., L.R.C.P. Lond., College-lawn, Cheltenham.
Woodall, R. W., L.R.C.P. Lond., Milner-square, Islington.
Woodcock, Herbert de Carle, L.R.C.P. Ed., Moorville House, Leeds.

The following gentlemen, having passed the necessary examinations, were at the same meeting admitted Licentiates in Dental Surgery:—

Ambrosoni, Francis Angelo, Grand Parade, Brighton.
Bright, Stanley Charles, Via Assaroth, Genoa, Italy.
Carter, Edward George, Edgware-road.
Cowell, Charles Joseph, Christian-road, Preston, Lancs.
Day, Joseph Henry, Alfred-street, Brompton.
Dunlop, James Nairn, Lord-street, Southport.
Haycroft, Frederic Theodore, South Lawn-terrace, Exeter.
Harper, Henry Guy, Charleville-road.
Knowles, Albert Vernon, Albion-place, Reading.
Mallet, John Aubrey, Powderham-crescent, Exeter.
Parrott, John Ernest, Hagley-road, Birmingham.
Richardson, Frank Victor, Kibworth, Leicester.
Seville, John William, Belvedere, Bath.
Spray, George Goldfinch, Conway-road, Canton, Cardiff.
Stoddart, Walter Guy, Lower Seymour-street.

The following gentlemen passed the First Professional Examination for the diploma of Fellow at a meeting of the Board of Examiners on the 11th inst.:—

C. Barker, student of Sheffield School of Medicine; H. E. R. James, of Charing-cross and Dublin; and J. R. Morison, of Edinburgh University. (17 candidates were referred).

Passed on the 12th inst.:—

T. E. Leadbeater, of London Hospital; R. M. Littler, of Owens College, Manchester; A. W. McMichael, of Queen's College, Birmingham; W. H. Maidlow, of St. Bartholomew's and Durham; A. W. Sheen, of Guy's Hospital; C. Williams, of University College.

VICTORIA UNIVERSITY.—The following is a list of candidates who have qualified for Medical degrees:—

Doctor of Medicine.—John Brown, M.B., Ch.B., Owens College, Manchester; Robert James M'Lean Buchanan, M.B., Ch.B., University College, Liverpool; Henry Waytes Pomfret, M.B., Ch.B., Owens College, Manchester.

Bachelor of Medicine and of Surgery.—First Division: *Albert Edward Brindley, *Theophilus Nicholas Kelynack, *Robert Ellis Lord, Jas. Sinclair M'Gowan, *Arthur James Moss, and *Frank Lomax Wood, Owens College, Manchester.

Second Division.—Richard Alcock, Albert Ashton, John Dunlop, and *George Fredk. Edwards, Owens College, Manchester; John Wm. Ellis, University College, Liverpool; *Charles Frederick Marshall and Harry Merrall, Owens College, Manchester; Edwd. Molyneux, University College, Liverpool; Thomas Porter, James Simcock, Frederic Wilson Stansfield, *John Clough Thresh, James Wilcock Unsworth, Arthur Blair Watson, and Fredk. James Webb, Owens College, Manchester.

* With distinction.

CONJOINT SCHEME OF THE COLLEGES OF PHYSICIANS AND SURGEONS IN IRELAND.—The following gentlemen have passed their Fourth Professional or Final Examination:—

E. Corbett, W. B. Croker, L. Dorran, T. Gilcriest, T. A. Goodchild, L. M. Hingerford, P. H. Lennon, M. J. Madden, J. H. Pim, R. P. Ryan, E. F. Stephenson, T. G. Stephens, J. S. Stewart, J. J. Tate, R. E. Thompson, R. S. Young.

ABERDEEN UNIVERSITY CLUB, LONDON.—The next half-yearly dinner of this club will take place at the Holborn Restaurant on Wednesday, Nov. 20th, at 7.30 P.M., the Hon. Mr. Justice Stirling in the chair.

BEQUESTS.—Mr. John N. Murphy of Clifton, Cork, has left £100 to St. Patrick's Hospital for Incurables; £100 to St. Vincent's Children's Hospital, Cork; and £100 to the Mercy Hospital, Cork.

METROPOLITAN HOSPITAL SATURDAY FUND.—A special meeting of the Board of Delegates was held on Saturday at the office of the Fund, for the purpose of appointing Sir James Whitehead, Bart., as chairman and vice-chairman to the Fund, who had intimated his willingness to undertake the office. It was at the same time announced that Sir H. A. Isaacs, the present Lord Mayor, had accepted the position of president of the Fund. These appointments having been made, resolutions were carried, on a report of a special sub-committee, in respect to a scheme for the appointment of annual and life governors at the various hospitals receiving grants from the Fund.

EXHIBITION OF AMBULANCE APPLIANCES.—At a council meeting of the Animal's Institute, held this week, it was decided to open an exhibition of ambulance and first-aid appliances, when the medals of the institute will be awarded to successful competitors. All exhibits must be sent in by Nov. 27th to 9, Kinnerton-street, Wilton-place, S.W.

RABIES.—The number of dogs in England officially reported during the week ending Nov. 2nd as affected with rabies was nine, against six in the preceding week. Of these, eight were killed and one died. The distribution was as follows: Middlesex (excluding London), four; Yorkshire (West Riding), two; and Essex, London, and Sussex, (Western Division), one each.

A NEW PATENT BED.—A new patent bed called the "turnover," the invention of a nurse, was exhibited last week at the Fine Arts Rooms, Gower-street. When sufficient funds have been subscribed to defray the cost of the invention, it is proposed to present the bed to a hospital, or else to utilise it for nursing the sick poor in the East-end. Particulars may be obtained from Lady Mary Glyn, the Vicarage, Kensington.

PROPOSED CONVALESCENT HOME FOR LEICESTERSHIRE.—On the 6th inst., a large and influentially attended meeting was held at the Town Hall, Loughborough, for the purpose of establishing a convalescent home for the borough and the shire, Mr. Alderman Griggs, the Mayor, presiding. The existing Home at Woodhouse Eaves, consisting of three cottages, was totally inadequate to meet the demands of the county. A building containing forty beds, capable of extension, was required. Resolutions were adopted pledging the meeting to take the necessary steps to promote the object in view. An offer of an eligible site in the Charnwood Forest had been made, and before the meeting closed subscriptions amounting to £1075 were promised.

ST. JOHN AMBULANCE ASSOCIATION.—Mr. John Turley, the energetic honorary director of the above Association, had the control of the wheeled ambulance transport which was posted along the line of route of the Lord Mayor's procession on Saturday last. Two-horse ambulance carriages and two Ashford litters were posted at Scotland-yard, the Embankment, and Law Courts respectively, and detachments of men from the St. John's Gate and Stratford (G.E.R.) divisions of the metropolitan corps of the St. John Ambulance Brigade, under the command of Superintendent W. J. Church Brasier, were on duty, and during the day did much good service in the case of the various slight casualties which occurred.

NEW (JUBILEE) HOSPITAL, MANSFIELD. — On Monday, Mrs. Hollins, Pleasley Vale, formally laid the foundation-stone of the new Mansfield and Mansfield District Hospital, situated in the West Hill Drive, and which is to commemorate the Queen's Jubilee. The amalgamation of the two existing cottage hospitals at Mansfield and at Mansfield Woodhouse (a long-felt desideratum) having been accomplished, the joint committee are enabled to commence the erection of this new hospital for the district. For this purpose £2800 is in hand or promised. The estimated cost of the building, site, and furnishing is £2733. There will be two wards containing five beds for in-patients.

NATIONAL DENTAL HOSPITAL AND COLLEGE.—The medical officers and lecturers of this institution, situated in great Portland-street, dined together with a number of guests on the 8th inst., at the Holborn Restaurant, on the occasion of the annual distribution of prizes. Mr. Henry Morris, M.A., M.B., was in the chair, and the company included the Dean, Mr. F. H. Weiss, and Dr. B. W. Richardson. Prizes for dental anatomy were given to Messrs. R. S. Faro and J. N. Dunlop, and for dental surgery to Messrs. F. L. Haycroft and J. N. Dunlop. Messrs. S. Keele and A. Moore received prizes for dental mechanics and metallurgy respectively, whilst the Rymer gold medal was awarded to Mr. J. N. Dunlop. There were fourteen certificates. The Chairman, in proposing "The Hospital and Staff," said that a new hospital was about to be erected in Great Portland-street, and three-fourths of the necessary funds had already been subscribed. The Dental College had wrought a revolution in the large section of the medical profession known as dental surgeons, whereby charlatanism, quackery, and imposition were being eradicated.

MEDICAL OFFICERS OF HEALTH.—An ordinary meeting of the Society of Medical Officers of Health was held on the 8th inst. at the Scottish Corporation Hall, Fleet-street, E.C., the President, Dr. H. Armstrong, in the chair. The report of the Council was read, and the consideration of a paragraph recommending that medical men qualified in public health be eligible for election to the Society was adjourned till the next meeting, Dr. Dudfield remarking that it was a point vital to its constitution. A recommendation in the report was adopted that the Society should request the Metropolitan Asylums Board to "star" the names of patients removed to hospital in the returns which they furnish weekly of the cases of infectious diseases notified in London, and that the Board be also requested to supply medical officers of health with a summary of the return. Several new members were elected, and the President read an interesting paper on "The Education, Training, and Qualification of the Medical Officer of Health," which was followed by a discussion.

PRESENTATIONS.—Mr. William Lees, M.R.C.S., for upwards of five years house surgeon to the Chester General Infirmary, has been presented by the nursing staff of the institution with two handsome cases of surgical instruments; and the same staff has also presented to Mr. Alfred Mann, M.B., C.M. Edin. (who has retired from the office of visiting surgeon), with a similar case of instruments.—The Mayor of Hull (Mr. J. Sherburn, M.R.C.S), on the 6th inst., at the Town Hall, among other presentations for bravery, presented the Royal Humane Society's bronze medal and certificate to Mr. J. H. Wilson, surgeon, of Hull, for saving a little boy from drowning at Newington on Sept. 13th, 1888.—Dr. P. Murray Braidwood has just received an award at the Glasgow Exhibition for his exhibit of plans of hospital ships. It consists of a beautiful work of art, and, together with similar awards for the same subject obtained at the Liverpool and Adelaide (South Australia) Exhibitions, forms a gratifying recognition of the usefulness of Dr. Braidwood's idea, and its adaptation for relieving the sufferings of the sick and wounded at sea.—At a large and enthusiastic meeting held at Cambois on the 11th inst., the vicar (Rev. Mr. Usher) presented Dr. James Mason with a gold chain and seal, on behalf of the members of the ambulance class of that place.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BEACH, L. B., L.R.C.P. Lond., M.R.C.S., has been appointed House Physician to King's College Hospital.

BEALE, P. T. B., M.D., M.R.C.S., L.R.C.P. Lond., L.S.A., has been appointed House Surgeon to King's College Hospital.

BROADBENT, F., M.R.C.S. Eng., L.R.C.P. Edin., has been appointed Medical Officer of the Collingham District, Newark Union.

BROOM, ROBERT, B.Sc., M.B., C.M. Glas., has been appointed House Surgeon to the Maternity Hospital, N. Portland-street, Glasgow, vice G. Scott MacGregor, M.B., C.M. Edin., resigned.

CHEADLE, A. H., M.R.C.S., L.R.C.P. Lond., has been appointed Senior House Surgeon to King's College Hospital.

COTES, C. E. H., B.A., M.B., B.S. Cantab., F.R.C.S., has been appointed Surgeon to Out-patients at the Lock Hospital and Asylum, Harrow-road, London.

DUNN, EDWIN L., M.B., has been appointed Assistant House Surgeon to the Liverpool Dispensaries.

GRIFFITHS, EVAN, L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of the Llanybyther District, Lampeter Union.

GUNN, F. W., L.R.C.P. Lond., L.S.A., M.R.C.S., has been appointed House Accoucheur to King's College Hospital.

HALL, E. F., M.D. St. And., M.R.C.S. Eng., has been reappointed Medical Officer of Huyton-with-Robey Union District.

HEWLETT, R. T., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Physician to King's College Hospital.

JONES, HUGH, M.B., C.M., D.P.H. Glas., has been appointed House Surgeon to the Maternity Hospital, N. Portland-street, Glasgow, vice Henry L. G. Leask, M.B., C.M. Glas., resigned.

MONTEITH, JAMES, M.B. & C.M., has been appointed Assistant Medical Officer to the Dorset County Asylum, vice R. D. Booth, M.B., resigned.

NEALE, George, L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Barry District, Cardiff Union.

PALMER, SYDNEY J., M.B., has been appointed Assistant House Surgeon to the Liverpool Dispensaries.

PENNY, J., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to King's College Hospital.

REES, E. D., L.S.A., L.R.C.P. Lond., has been appointed Assistant House Accoucheur to King's College Hospital.

SHEPPARD, CHARLES E., M.D., B.S., F.R.C.S., has been appointed Second Chloroformist to the Middlesex Hospital.

SHIELL, W. J., L.R.C.S., L.R.C.P. Edin., L.M. Rot. Dub., has been appointed District Surgeon of Peddie, S.A., under Colonial Government.

SWIFT, SIDNEY S., M.R.C.S., L.R.C.P. Lond., has been appointed Assistant House Surgeon to the Liverpool Dispensaries.

WILSON, THEODORE S., M.R.C.S., has been appointed Assistant Physician at the General Hospital, Birmingham, vice Foxwell, resigned.

WINSHIP, W. A., M.R.C.S., L.S.A., has been appointed Medical Officer of the Elsdon District, Rothbury Union.

YEOMAN, W. M., M.R.C.S., L.S.A., has been appointed Medical Officer of Stokesley Rural District.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer. Salary £80, with board and lodging.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—Ophthalmic Surgeon.

HALIFAX INFIRMARY AND DISPENSARY, Hope hall, Halifax.—Senior House Surgeon. Salary £80 per annum, advancing to £100, with residence, board, and washing. Also Assistant House Surgeon. Salary £50 per annum, with residence, board, and washing.

KING'S COLLEGE, London.—Sambrooke Surgical Registrarship.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.—Junior House Surgeon. Board and residence in the hospital.

MAIDSTONE UNION, Maidstone.—District Medical Officer and Public Vaccinator for the 6th District of the Union. Salary as Medical Officer £60 per annum, exclusive of fees for midwifery cases and surgical operations allowed by orders of the Local Government Board, and fees for each case of successful vaccination.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, E.—Junior House Surgeon for six months, at a salary of £30.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Stipend £150 per annum.

ROYAL COLLEGE OF SURGEONS.—Examiners.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—Demonstrator of Physiology.

WARNEFORD HOSPITAL, Leamington Spa.—House Surgeon. Salary £100 per annum, with board, lodging, and washing.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Resident Assistant for six months. Board, lodging, and washing provided.

WOODSTOCK UNION, Woodstock.—Workhouse Medical Officer. Salary £35 a year, and for midwifery 10*s.* 6*d.* each case, and for each case of successful vaccination 1*s.* 6*d.* Also Medical Officer and Public Vaccinator for the Woodstock No. 1 District. Salary £40 a year; and for midwifery 10*s.* 6*d.* each case, and for each case of successful vaccination, 1*s.* 6*d.* within two miles, and 3*s.* beyond two miles, from the officer's residence.

Births, Marriages, and Deaths.

BIRTHS.

ANDERSON.—On Oct. 10th, at Barbados, West Indies, the wife of Surgeon Louis E. Anderson, Army Medical Staff, of a son.

CASTOR.—On Oct. 21st, at Mahaica, British Guiana, the wife of C. F. Castor, M.B., J.P., Medical Superintendent Leper Asylum, of a son.

FOLEY.—On Oct. 29th, at Marmora House, Honor Oak, S.E., the wife of C. N. Foley, L.R.C.P. Lond., M.R.C.S., of a daughter.

OSBORN.—On Nov. 13th, at Maisonnette, Datchet, the wife of S. Osborn, F.R.C.S., of a son.

WILSON.—On Sept. 28th, at Hughli, Bengal, India, the wife of Surgeon-Major Joseph Wilson, M.D., I.M.S., of a daughter.

MARRIAGE.

SLATER—MANDER.—On Nov. 7th, at Francis-road Congregational Church, Edgbaston, Birmingham, John S. Slater, M.R.C.S., L.S.A., of Evesham, to Agnes, eldest daughter of Elisha Mander, of Marston-green, Birmingham.

DEATHS.

BIANCHI.—On Nov. 8th, at Blackfriars-road, of angina pectoris, Robert Bianchi, Medical Officer of Health for St. Saviour's District, Southwark, aged 58.

CLAY.—On Nov. 9th, at Clapham, the Rev. W. French Clay, M.A., M.D., M.R.C.S., formerly of the Indian Medical Service, Bombay, aged 67.

SADLER.—On Nov. 11th, at Purton Court, near Swindon, Saml. Champernowne Sadler, F.R.C.S., J.P., within a few days of attaining his 81st year.

TREVAN.—At Park Villa, St. Endellion, Cornwall, Matthew Trevan, Staff Surgeon Royal Navy, aged 47.

WALTON.—On Nov. 7th, at Brook-street, Hanover-square, W., Henry Haynes Walton, F.R.C.S., aged 73.

WILSON.—On Nov. 7th, at Southsea, Fleet Surgeon Thomas George Wilson, F.R.C.S.Irel., Deputy Inspector-General of Hospitals and Fleets, aged 53.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, November 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5 P.M. Mr. John Marshall: Cancer and Cancerous Diseases. (Morton Lecture.)
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Haslam (Birmingham): (1) A case of Ruptured Gall-bladder; (2) Malignant Growth of Colon with Impaction of a Foreign Body.—Dr. de Havilland Hall: Acute Catarrhal Laryngitis, with urgent Dyspnœa, in an Adult.

Tuesday, November 19.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.
ROYAL STATISTICAL SOCIETY.—7.45 P.M. Opening Address by the President (Dr. T. Graham Balfour).
PATHOLOGICAL SOCIETY OF LONDON (at 20, Hanover-square).—8.30 P.M. Dr. S. West: Gastric Ulcer communicating with Colon.—Mr. A. Marmaduke Sheild: Tumour of Gracilis Femoris Muscle.—Dr. Hale White: Symmetrical Aneurysms of Vertebral Arteries.—Dr. Washbourne: Microscopical Sections of the same.—Mr. J. Bland Sutton: Albinism, Nystagmus, and Imbecility in a Monkey.—Mr. Norman Moore: Specimens of New Growth at Root of Lung.—Mr. E. Hurry Fenwick: Sarcoma of Crus Penis. Card Specimens:—Dr. H. W. G. Mackenzie: Congenital Disease of Heart, with Right-sided Endocarditis.—Mr. Alban Doran (for Sir Spencer Wells): Dermoid Ovarian Cyst, Infiltration of Broad Ligament with Fat.—Dr. Hawkins: Pelvic Calculi in Kidneys.

Wednesday, November 20.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.
HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.—4 P.M. Dr. John Tatham: On Cancerous Growths in the Lungs.
SOCIETY OF ARTS.—8 P.M. Opening Address of the 136th Session by the Duke of Abercorn, C.B., and Presentation of Prizes.

Thursday, November 21.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.
CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK, E.—4.30 P.M. Dr. Heron: On the Question of the Contagiousness of Consumption.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. Knowsley Thornton: The Surgery of the Kidney. (Harveian Lecture.)
NEUROLOGICAL SOCIETY OF LONDON (The National Hospital, Queen-square, Bloomsbury).—8.30 P.M. Patients at 8 P.M. Dr. Hale White: Case of cured Cerebro-spinal Meningitis.—Dr. F. W. Mott: Bilateral Spasm (Chorea?) in a Child.—Dr. Hadden: Defect of Articulation in a Boy.—Dr. Buzzard: Two cases of Lead Paralysis.—Dr. T. Savill: Widespread Amyotrophy in a Girl aged seventeen years.

Friday, November 22.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON (at 20, Hanover-square).—8.30 P.M. Dr. Sidney Martin: Case of Pyloric Gastric Ulcer, with Syatolic Epigastric Thrill; Death following Hæmatemeses.—Dr. C. Scott Watson: Case of Ptomaine Poisoning.—Dr. Coutts and Dr. A. Garrod: Three cases of Rheumatic Periostitis.—Mr. Bland Sutton: Tumour of Supra-orbital Nerve.

Saturday, November 23.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, November 14th, 1889.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Nov. 8	30·52	N.W.	55	54	71	59	43	..	Foggy
,, 9	30·40	W.	49	48	62	57	47	..	Foggy
,, 10	30·38	S.E.	52	49	71	57	49	..	Foggy
,, 11	30·43	N.E.	54	52	..	55	45	..	Overcast
,, 12	30·41	S.E.	45	43	64	48	43	..	Overcast
,, 13	30·34	S.E.	39	39	64	50	38	..	Foggy
,, 14	30·33	S.E.	46	46	..	48	38	..	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

THE PROPOSED FIVE YEARS' CURRICULUM.

To the Editors of THE LANCET.

SIRS,—I see by your issue of the 9th inst. that the Conjoint Board think of extending the medical curriculum to five years. Except, as you mention in your leader, this is made compulsory on all the examining boards of the United Kingdom, it would only tend to the injury of the Royal College of Physicians of London and the Royal College of Surgeons of England, as men find it often difficult enough to obtain the means for a four years' studentship, and would, therefore, go to other examining boards.

There is one point that I have thought much of which would be to the great advantage of both the older and younger men in the profession—viz., that before being granted their diplomas, and after passing all the examinations of the College, they should be compelled to produce a certificate of having been engaged in the duties of a general practice for, say, twelve months, so as to enable them to be more capable of undertaking private practice for themselves, and also to teach them a subject that I have found many freshly qualified men ignorant of—dispensing.

Further, before the Boards put a greater strain upon the medical students, some steps should be taken to prevent the large number of unqualified men from not only acting as assistants, but taking charge of branch practices and doing work as locum tenens. Within the small radius of my practice—not in a large town—there are not less than five unqualified men who do even more than a fair share of the various practices. One man is to be seen constantly driving about in his employer's brougham. Another has lately been locum tenens for a practitioner during his holiday. None of these men are known to have ever passed a professional examination, and are doing the work which should be done by the junior members of the profession. This was the subject of a paper read by me before a branch of the British Medical Association twenty years ago under another heading.

In my opinion the old apprenticeship prior to hospital work is beginning at the wrong end.—I am, Sirs, yours faithfully,

Nov. 11th, 1889. AN APPRENTICE OF 1846.

Suffolk.—THE LANCET of Aug. 8th, 1885, contained an extract from the *Justice of the Peace* of Aug. 1st, which set forth, in the shape of question and reply, the law of the case as regards the demand of School Boards for medical certificates for non-attendance of scholars. The gist of the reply is that "there is nothing in the Education Act requiring a doctor to give a medical certificate without a fee, or at a prescribed fee, and the party who applies to him for such certificate must pay him."

Dr. McVail (Kilmarnock).—The packet, for which we thank our correspondent, has been received, and will have attention.

Dr. A. Tucker Wise.—The cases are not quite comparable, though certainly the notification fee is inadequate.

Mr. F. D. Hamilton.—We regret we cannot assist our correspondent.

THE MUTUAL LIFE INSURANCE COMPANY OF NEW YORK.

THIS Society has been long and honourably distinguished among kindred institutions for the magnitude of its operations and the excellence of the results which it has been able to show. These points are elaborated and enforced in a handsome pamphlet, of which we have received a copy. The wholesale scale of its transactions is not only demonstrated by figures in which millions figure with bewildering facility, but is also presented to the eye by a series of drawings of the Chief Office accommodation and Chief Office staff, in which the number of persons engaged about such operations as the actuarial business of the Company strikingly brings home the vast dimensions of the work in progress. The well-merited popularity of such a society as this is a very considerable factor in the success of life assurance as an institution of the present day.

H. L.—If the non-resident district officer is appointed only for a certain time (as is generally the case), it is quite open to the medical man residing in the district to apply for the appointment at the termination of the contract, and if his qualifications are sufficient and there is nothing against his character, it is the duty of the guardians to appoint him. It is not in the power of our correspondent to upset the present arrangement prior to an election.

Madeira.—An examination must be passed, conducted in the Portuguese language, in one of the medical schools of Portugal, or in that of Funchal.

THE MOON DEFENCE FUND.

To the Editors of THE LANCET.

SIRS,—At a meeting of the West Kent Medico-Chirurgical Society, held on Friday evening, Nov. 8th, 1889, at the Royal Kent Dispensary, Greenwich, the following resolution was passed unanimously:—"That the congratulations of this Society be given to Dr. Frederick Moon on the result of the recent trial (Oct. 28th, 29th, and 30th) at the Old Bailey, a verdict of acquittal on all the serious charges alleged against him being returned by the jury." And it was further resolved that a special appeal be made to the profession generally in aid of the local efforts to raise a fund to defray the heavy expenses incurred by Dr. Moon in his defence. Subscriptions may be sent to Mr. Thos. Moore, F.R.C.S., President of the Society, 6, Lee-terrace, Blackheath; Prior Purvis, M.D.Lond., Treasurer, 5, Lansdown-place, Blackheath; Peter Horrocks, M.D.Lond., 9, St. Thomas-street, Borough, S.E.

I am, Sirs, yours faithfully,
H. W. ROBERTS, M.R.C.S., Secretary.

Wickham-terrace, Lewisham High-road, S.E., Nov. 9th, 1889.

The following subscriptions have already been received:—

Peter Horrocks, M.D.	..	£5	5	0	Anonymous	£1	1	0
Thos. Moore, F.R.C.S.	..	3	3	0	Ernest Clarke, M.D. ..	1	1	0
John Anderson, M.D.	..	2	2	0	Thos. Creed, M.D. ..	1	1	0
J. Hammersley, M.R.C.S.		2	2	0	Alex. Forsyth, M.D. ..	1	1	0
H. W. Roberts, M.R.C.S.		2	2	0	J. Mainwaring, M.R.C.S.	1	1	0
Henry Wintle, M.D.	..	2	2	0	Jno. McGavin, L.R.C.P.Ed.	1	1	0
Prior Purvis, M.D.	..	1	11	6	Jno. Prior Purvis, M.R.C.S.	1	1	0

M.R.C.S.Eng.—1. Pretty full information will be found in THE LANCET of 1888 on pp. 531, March 17th; 596, March 24th; 647, March 31st; 700, April 7th; 745, April 14th; 798, April 21st; and 926, May 12th.—2. We must refer our correspondent to our advertising columns for an answer to his second query.

Dr. A. Duke (Dublin).—We regret to be unable to make a definite promise.

EMPYEMA OF THE ANTRUM.

To the Editors of THE LANCET.

SIRS,—Will you allow me to correct two mistakes which I find have crept into the otherwise excellent abstract of my paper on the above subject published amongst the annotations in your issue of to-day?

Firstly, in my paper I divided the cases of empyema of the antrum into (1) that class in which there is *free* discharge into the nasal cavity, and (2) that class in which from some cause the ostium maxillare is not patent. The reason of this subdivision is that the symptoms materially differ in both classes of cases. Instead of "free" discharge, I am in the corresponding sentence of the annotation made to say "no" discharge, by which, no doubt, clerical error my division altogether loses its meaning.

Secondly, I stated that when there is retention of the discharge in the antrum owing to obstruction of the nasal opening, *any* wall of the antrum may become distended, not only the "inner" wall, as I am made to say in the annotation. As this is a point of considerable diagnostic importance, I should be much obliged if the mistake were as speedily as possible corrected. I am, Sirs, yours truly,

Wimpole-street, W., Nov. 9th, 1889. FELIX SEMON.

"THE SO-CALLED PRESYSTOLIC MURMUR."

To the Editors of THE LANCET.

SIRS,—Might I be allowed to correct two clerical errors in my letter of Nov. 9th?

Instead of "they are matters of," on p. 977, 1st col., l. 36, it should read *it is a matter of*; and "systolic" on same page, 2nd col., l. 54, should read *presystolic*. I am, Sirs, yours truly,

The Royal Infirmary, Manchester. ERNEST S. REYNOLDS.

"COCAINE IN WHOOPING-COUGH."

To the Editors of THE LANCET.

SIRS,—In answer to the inquiry in THE LANCET of Oct. 12th as to the effect of cocaine and its mode of application in whooping-cough, would call your correspondent's attention to a letter published in the *New York Medical Journal* for Nov. 6th, 1886. In September, 1885, I treated a little girl of two years, who had a broncho-pneumonia complicating a pertussis. The cough was so severe that it was almost impossible for the child to retain any food. The application of a 4 per cent. solution of cocaine made to the throat with a swab gave relief from cough for some time. The applications were persevered in, and the child recovered. An older sister of this patient had a severe bronchitis with the pertussis. Her throat was washed with the cocaine solution much in the same manner as in the other child. I have used cocaine quite extensively, but latterly not so much as when it was introduced. I generally order the 4 per cent. solution applied to the throat just after a paroxysm of cough. The peculiar dryness that the drug causes has been disagreeable in a number of cases. That and the difficulty that parents and nurses have in treating a child's throat have led me to discontinue the treatment by cocaine, except in such cases as reported above. Dr. Holt read a paper before the New York Clinical Society on "Cocaine in Whooping-cough," and the communication was published in the *New York Medical Journal*, Oct. 23rd, 1886. Your correspondent will find further references in the *Index Medicus*.

Hoping that this reply will not be received too late to be of some use to Dr. Dearden, I am, Sirs, yours very truly,

New York, Oct. 30th, 1889. WALTER LESTER CARR.

"TREATMENT OF CARBUNCLE BY CARBOLISED SPRAY."

To the Editors of THE LANCET.

SIRS,—To the inquiry respecting the subcutaneous injection of carbolic acid in the treatment of carbuncle made by your correspondent "M.R.C.S." in his letter published in THE LANCET of last week, and headed as above, I forward the following note as a reply, which I have taken from the *Journal de Médecine de Bordeaux*, 1889, Nos. 38 and 39.

Drs. Arnozan, Lande, and Maurange have cited two cases of grave carbuncle cured by the subcutaneous injections of carbolic acid. They injected into the cellular tissue of the inflamed peripheric zone five grammes of a solution composed as follows:—Glycerine and distilled water, of each fifteen grammes; crystallised carbolic acid, three grammes. These injections were practised at five different points circumscribing the inflamed region. They represent a total dose of fifty centigrammes of carbolic acid. The authors affirm that under the influence of this medication the amelioration of the local and general state was prompt, as in twenty-four hours after the first injections the probability of a cure was manifest. In short, this treatment, which was introduced by Prof. Verneuil some time ago, is now generally adopted in the Paris hospitals.—Yours obediently,

Paris, Nov. 12th, 1889. ALEX. BOGGS, M.D.Paris.

SOMERVILLE *versus* ROSE.

IN the summary of this case which we published last week, contributed by a correspondent, by a typographical error the action was represented as having been brought by "Mr. Somerville." It should have been, as the context clearly shows, *Mrs.* Somerville.

A Constant Reader.—The ordinary custom is to charge less for children, who really require most attention. The rule of the Coventry Provident Dispensary is that any member above twelve pays one penny per week, and under that age a halfpenny, except in a family of not more than three persons, when one penny per week, and in a family of more than three twopence per week, shall be considered sufficient for all under twelve.

THE ITALIAN MEDICAL CONGRESS.

To the Editors of THE LANCET.

SIRS,—On page 988 of your last issue you state: "Messrs. Hearon, Squire, and Francis conceive St. Marco Lithia Water is included in Signor Cantani's *general condemnation* of Italian waters quoted in our last issue, page 935." If you refer to page 935 you will find Signor Cantani does not condemn Italian mineral waters. Far from doing so, he praises them, and you report him as follows:—"We have [he says] waters superior to those of Vichy and Karlsbad, but almost unknown or fallen into discredit through having been improperly worked by private and non-professional speculators." As St. Marco Water is the only Italian mineral water imported into this country, we shall be obliged by your allowing this correction to appear, as St. Marco Water was awarded a silver medal at the above Congress last month, and you will observe Signor Cantani praises the Italian waters and only condemns the system by which they are worked.—Yours faithfully,

Coleman-st., E.C., Nov. 14th, 1889. HEARON, SQUIRE, & FRANCIS.

Cough Mixture.—1. Ammon. carb. or ammon. chlor. may be given with spirits of chloroform, or with acetate of ammonia, or with camphor water. These may be mixed in the usual proportions. It is also frequently used with compound tincture of cardamoms and infusion of cloves.—2. The taste is usually rendered less unpleasant by spirits of chloroform and syrup, or else by tincture of squill. Numerous other combinations will be found in Squire's Pharmacopœias of the London Hospitals.

Dr. Dockrell.—In an early number.

MEDICAL DEFENCE UNION.

To the Editors of THE LANCET.

SIRS,—We are requested by the Treasurer of the Medical Defence Union to ask you to allow us to acknowledge in the columns of THE LANCET the receipt of £3 1s. 3d., as a donation towards the funds of the Union, sent by Mr. Reginald Sleman, this sum being the balance of a subscription invited by Mr. Sleman for the purpose of eliciting a declaration of the exact title which the qualification L.S.A. carries. A resolution was passed at the Council Meeting of the Medical Defence Union on the 8th inst. thanking Mr. Sleman for his kindness to the Union.

We are, Sirs, yours faithfully,

A. G. BATEMAN, } Hon. Secs., Medical
Nov. 12th, 1889. LESLIE PHILLIPS, } Defence Union.

Mr. H. Allan.—The report was issued by a committee appointed by the British Medical Association, and was commented on in THE LANCET of July 28th, 1888.

ERRATA.—On p. 913, second column, twentieth line from top, for "vaccination" read *cremation*.—In the review of the French Pharmaceutical Section of the Paris Exhibition, published in our issue of Oct. 12th, there were a few typographical errors. At page 759, thirty-eighth line from bottom of first column, for "fagoglycine" read *fugo*-glycine Gressy; and in the thirty-second line from bottom of same column "Aspic" should be *Espic*. In the same column "M. Chaissaing" should be *M. Chassaing*. Further, in mentioning the pills exhibited by Messrs. H. Fournier and Co., which bear clearly printed outside each pill its contents, it should be stated that the pill is *non*-sugar-coated.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Wm. Roberts, London; Dr. Wilks, London; Dr. Semon, London; Dr. Ward Cousins, Southsea; Dr. Marshall, Nottingham; Messrs. Worth and Co., London; Mr. T. Bryant, London; Dr. Gowers, London; Dr. James Anderson, London; Dr. E. S. Reynolds, Manchester; Messrs. Wilcox and Co., London; Mr. Meadows, Hastings; Mr. B. Squire; Dr. Wallace Anderson, Glasgow; Dr. Maguire, London; Messrs. Thompson and Co., London; Mr. H. W. Roberts, Lewisham; Dr. Bell Taylor, Nottingham; Dr. Stevenson, London; Dr. Whitaker, Derby; Mr. E. M. Sympson, Lincoln; Dr. M. Craven; Mr. Haviland, Douglas; Dr. Keith, London; Mr. Oldham, Liverpool; Mr. Stretton, Leeds; Mr. Nelson Hardy, Dulwich; Mr. Bramwell, Stapleford; Messrs. Macfarlan and Co., London; Dr. Walford, Cardiff; Dr. Corley, Dublin; Mrs. Acland; Dr. J. A. Gibson, Norfolk; Mr. W. H. Bennett, London; Lady Mary Glyn, London; Dr. Rentoul, Liverpool; Messrs. Gibbs, Cuxson, and Co., Wednesbury; Mr. T. P. Cowen, London; Messrs. Merryweather and Sons, London; Dr. J. A. Campbell, Carlisle; Dr. W. L. Carr, New York; Dr. F. Warner, London; Mr. Gates, Worthing; Dr. Ashburton Thompson, New South Wales; Mr. Staveley, London; Mr. Morton Smale, London; Mr. St. Dalmas, Leicester; Mr. Hoar, Maidstone Union; Dr. De H. Hall, London; Dr. Wolfe, Glasgow; Dr. Tucker Wise, London; Dr. Neil Macleod, Shangai; Messrs. Gibbons and Co., Leicester; Dr. R. J. Carter; Messrs. Burroughs, Wellcome, and Co., London; Dr. Shaw, Sheerness; Mr. T. Laffan; Dr. Beale, South Tottenham; Dr. Wetherell, Barnsley; Rev. E. Lacon; Messrs. Oliver and Boyd, Edinburgh; Mr. S. C. Noble, Kendal; Mr. Keen, North Wales; Dr. Gilroy, Ecclefechan; Dr. C. H. Leet, Dublin; Dr. Swain Scriven, Derby; Dr. Lawrie, Ayr; Dr. O'Neill, Belfast; Dr. Burnet, London; Mr. Michelli, London; Mr. Craddock, Bath; Dr. F. Beach, Dartford; Mr. P. S. Hutchinson, London; Mr. Macphail, Coatbridge; Mr. Barnett, Salop; Mr. Boyson, Clapham; Mr. Hawkins, Woodstock; Mr. Canney, Pulborough; Mr. Howe, Beds; Mr. Pound, Hants; Mr. Boake, Wigan; Mr. Peacock, Bradford; Mr. Sparrow, Southsea; Mr. Dixon, India; Mr. Jenkins, Dresden; Mrs. Levick, Paris; Mr. Swami, India; Mr. Dunlop, Southampton; Mr. Sergeant, London; Mr. Reid, Lambeth; Mr. Dunk, Leeds; Mr. Brice, Sheerness; Dr. Brecknell, Deptford; Mr. Earée, Bures; Dr. de Laprade, Lyons; Dr. Churton, Leeds; Mr. Nicholls, London; Dr. Maynard, Kent; Mrs. Pratt, Liverpool; M. Gallois, Paris; Mr. Bass, Langsett; Mr. Hubann, Loughboro'; Mr. Fuge, Taunton; Mr. White, Wolverhampton; Dr. Steele, Ealing; Dr. Field, Clapham; Mr. Butcher, London; Mr. Somerville, Norwood; Mr. Morton, Glasgow; Dr. Sibley, London; J. R. Endean, Locarno; W. D., London; M.R.C.S. Eng.; Suffolk; M.B.Glas.; Apex; Fairplay; E. J. M.; Simpson-Mackirdy Express Co., Liverpool; D. M.; Sanifer, London; The Patent Borax Co., Birmingham; M.D., Maida-vale; R. J. W., Edinburgh; Cough Mixture; Initial, Dudley; Medicus, Bristol; Secretary, City of London Hospital, Victoria-park; Cerium, London; Madeira; An Apprentice of 1846; Club, London; A. H. L.; L. M., London; Secretary, Worcester General Infirmary; Diploma, London; Mutual; Secretary, Yorkshire College, Leeds; Jeyes' Sanitary Co., London.

LETTERS, *each with enclosure*, are also acknowledged from—Sir Henry Thompson, London; Mr. Krishmaswaini, India; Messrs. Rowntree and Co., York; Mr. Young, Ayrshire; Dr. Grant, Yorks; Mr. Mark Hovell, London; Dr. Nicholson, Kensington; Messrs. Mertens and Co., London; Dr. Ord, Halesowen; Miss Measer, Hants; Messrs. Cox and Co., Brighton; Mr. Tyte, Minchinhampton; Messrs. Powneeby and Co., London; Mrs. Anderson, Carmarthen; Messrs. Robbins and Co., London; Mr. Davies, Newport; Mr. Phillips, Suffolk; Mr. Tully, Hastings; Mr. Ungent, Cookstown; Mr. Eyre, Pontypool; Mr. Laud, Tunbridge; Surgeon Lauder, Batley; Mr. Dunlop, Southampton; Mr. Skinner, Somerset; Mr. Harries, Llanelly; Messrs. Cheston and Veet, Birmingham; Dr. Owen, Holyhead; Messrs. Giles, Schacht, and Co., Clifton; Mr. Clements, Burton-on-Trent; Messrs. Roberts and Co., London; Mr. Wright, Harrogate; Mr. Laitz; Messrs. Beaman and Street, Lancs; Mr. Forsyth, Glasgow; Mr. Harkin, New South Wales; Mr. Campbell, London; Mr. Evans, Radnor; Messrs. Condy and Co., London; Mr. Coghill, Birmingham; Mr. Boyson, Larkhall Rise; Mr. Griffiths, Eastry; Mr. Norton, Somerset; Messrs. Antis and Co., London; Mr. Monson, Stornoway, N.B.; Mr. Forrest, Great Yarmouth; Mr. Day, Bournemouth; Mr. Stenhouse; Messrs. Battle and Co., Paris; Rev. W. Joscelyn, Tepworth; Messrs. Squire and Son, London; Dr. Field, Clapham; Mr. Allsop, Yorks; Messrs. Ross and Co., Belfast; Mr. Purland, Woolwich; Dr. Davies, Glamorgan; Mr. Trevan, Cornwall; Mr. Skinner, Somerset; Mr. Heywood, Manchester; Mr. Caudall, Guiseley; Mr. Knapp, Ross; Mr. Hamilton, Lancashire; Mr. Coleden, Bristol; Mr. Pound, Hants; Mr. Gobden, Edinburgh; Mr. Staff, Brighton; Mr. Davis, Russell-square; Sir J. Sawyer, Birmingham; Dr. Needham, Barnwood; Messrs. Grace, Bristol; Hospital, York; B. R., London; Secretary, Central London Throat and Ear Hospital; E. C., Manchester; Secretary, College of State Medicine, London; C. T., London; J. E. B.; Secretary, Royal United Hospital, Bath; M.D., London; Study, London; Secretary, Swansea Hospital; C. M. D., London; Finale, London; Secretary, Hamilton Association, London; Bruxelles, London; Royal Medical Benevolent College, London; Typo, London; Pharmacist, Kentish-town; Nurse Lucy, Goldstream, N.B.; B. B., London; T. N. G., London; Lady Superintendent, School of Massage, London; Secretary, Children's Hospital, Pendlebury; M.D., Somerset; Secretary, Glasgow Western Medical School; Surgeon, Grimsby; Manager, Hackney Furnishing Co., London; Verax, Brighton; G. R. V., London; Secretary, South Devon Hospital; B., Deptford; Medicus, Notts; Secretary, Borough Hospital, Birkenhead; Ogden; Insts., London; Medicus, Birmingham; Assistant, London; P. S., Liverpool; Medicus, Leeds; E. C. F., London; Clinique, London; F. W. H., London; J. M., London; J. B., Seaford; Medicus, Bristol; Medicus, Scarboro'.

Birkenhead News, Reading Mercury, Worthing Intelligencer, Margate and Ramsgate Gazette, Mining Journal, Surrey Advertiser, Hertfordshire Mercury, Weekly Free Press and Aberdeen Herald, Surrey Times, Pump Court, Glasgow Herald, Journal d'Amiens, &c., have been received.

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